NAVIGATION SYSTEM

Preparation
See page 4 for specific information.
Before Use

Immediate use
See page 4 for specific information.
Getting started

Routing

Advanced use
See page 5 for specific information.
Address Book

Voice Recognition

Navigation Set Up

If necessary
See page 5 for specific information.
If necessary

Audio System
See page 61 for specific information.
Audio System

Rear View Monitor
See page 83 for specific information.
Rear View Monitor

Hands-free Telephone
See page 89 for specific information.
Hands-free Telephone

Accessories

Please contact an Authorized Mazda Dealer if you are missing the following accessory.

- Map Disc

CAUTION:
THIS PRODUCT IS A CLASS I LASER PRODUCT. HOWEVER THIS PRODUCT USES A VISIBLE/ INVISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THIS PRODUCT CORRECTLY AS INSTRUCTED.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Laser products:
Wavelength: 650 nm
Laser power: No hazardous radiation is emitted with safety protection.

MEMO

Contents

Preparation

n Before Use
Accessories 2
Laser products: 2
Contents 4
Safety Information 6
Introduction 8
(Product Use Safety), (Navigation System),
(Beep sound and voice guidance restrictions while using hands-free telephone),
(Screens)
Names and Functions 9

Immediate use

n Getting started
l Activation 12
(Removing the Map Disc), (On-screen Buttons)
l Screen Names and Functions 14
(Screens Before Setting Route), (Screens During Route Guidance),
(Menu), (Screen adjustments, beep alert and other settings)
l Screen change 19
(Changing the Map Orientation/Scale)
n Routing
l Destination Entry and Route Search 20
(Change (Change Search Area)), (Address), (Point of interest),
(Emergency), (Memory Point), (Home), (Preset Destination),
(Previous Destination), (Intersection), (Freeway On/Off Ramp),
(Coordinates), (Select from map)
l Quick POI 28
(Displaying POI(s) on a Map), (Local Search), (Deleting POI Markers),
(Showing POI Data)
l Character Entry 29
(Street name, city name, and other input),
(House phone number, and other input)
l Direct Destination Input 30
(Direct Destination Input), (Selecting Route)
l POI Icons on Maps / Delete Destination 31
(POI (Point of Interest) Icons), (Delete destination)
l Route Options 32
(Route Preferences), (Modification of Destination or Way Point Positions),
(Deletion of Destination or Way Points), (Detour), (Turn List),
(Display Preview), (Route Preview)

Advanced use

n Address Book
- l Address Book 36
  (Memory Point Storage), (Memory Point Confirmation and Modification), (Preset Destinations or Home Storage), (Memory Point Deletion), (All Memory Point Deletion), (Displays Icons at Memory Points), (Avoid Area Storage), (Avoid Area Confirmation and Modification), (Avoid Area Deletion), (All Avoid Area Deletion), (Category Name Modification),(Previous Destination Deletion), (All Preset Destination Deletion)

n Voice Recognition
- l Voice Recognition 40
  (Voice Recognition Structure), (Language Select), (Basic Usage Pattern), (Cancel Voice Recognition), (Voice Recognition Command)
- l Volume Adjustment 42

n Navigation Set Up
- l Navigation Set Up 44
  (User Setting), (Quick POI Selection), (Calibration), (Restore System Defaults), (Language), (Map Configuration)

If necessary

n If necessary
- l Precautions/System Performance 53
  (Voice Guidance), (GPS), (Map Matching), (Positioning Accuracy), (Route Guide), (Route Search)
- l Troubleshooting 57
  (Verification First), (Error Messages)
- l Maintenance 60
  (Care of the Product), (Handling and Care of Map Discs)

Safety Information

n Read this owner's manual for your Navigation System carefully before using the system.
It contains instructions about how to use the system in a safe and effective manner.
Mazda assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.

n This manual uses pictographs to show you how to use the product safely and to alert you to potential dangers resulting from improper connections and operation. The meanings of the pictographs are explained below. It is important that you fully understand the pictographs and explanations in order to use this manual and the system properly.

Warning	**Warning**	The presence of this Warning symbol in the text is intended to alert you to the importance of heeding the operation instructions. Failure to heed the instructions may result in severe injury or death.

Warnings

n **Do not keep your eyes fixed on the monitor screen or operate the system while driving.**
Do not change the settings and destination locations while driving. Minimize the time spent on viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before operating the system.

n **Always obey local traffic regulations.**
Your guided route may include roads that are not open to vehicles or are closed due to traffic regulations. Comply with the local traffic regulations and take another route.

n **Do not use the unit when it is out of order.**
If the unit is out of order (no image, no sound) or in an abnormal state (has foreign matter in it, is exposed to water, is smoking, or smells), then turn it off immediately and consult with an authorized dealer, we recommend an Authorized Mazda Dealer. Using the unit in an out-of-order condition may lead to accidents, fires, or electric shocks.

n **Use the proper power supply.**
This product is designed for operation with a negative grounded 12 V DC battery system.

n **Do not disassemble.**
Do not disassemble the product or attempt to repair it yourself. If the product needs to be repaired, take it to an authorized dealer, we recommend an Authorized Mazda Dealer.

Caution	The presence of this Caution symbol in the text is intended to alert you to the importance of heeding the operation instructions. Failure to heed the instructions may result in injury or material damage.

Cautions

- **Do not use the product where it is exposed to water, moisture, or dust.**
  Exposure to water, moisture, or dust may lead to smoke, fire, or other damage to the unit. Make especially sure that the unit does not get wet in car washes or on rainy days.
- **Keep the voice guidance volume at an appropriate level.**
  Keep the volume level low enough to be aware of road and traffic conditions while driving.
- **Protect the Deck Mechanism.**
  Do not insert any foreign objects into the slot of this unit.
- **This navigation system is designed exclusively for use in automobiles.**
  This navigation system should only be installed in an automobile. Do not install it in a ship, aircraft, or any other vehicles except an automobile. Do not use it detached from the vehicle.
- **Do not insert or allow your hand or fingers to be caught in the unit.**
  To prevent injury, do not get your hand or fingers caught in moving parts or in the disc slot. Especially watch out for infants.

Operation is subject to the following two conditions;
(1) this device may not cause interference, and
(2) this device must accept any interference,
including interference that may cause undesired operation of the device.

Introduction

Product Use Safety

n **Extremely low or high temperatures may interfere with normal operation**
The inside of the vehicle can become very hot or cold when it is parked for extended periods in direct sunlight or in cold places with the engine turned off. The navigation system may not operate normally under such circumstances. Turn off the navigation system until the inside of the vehicle has cooled down or warmed up. If the system does not operate thereafter, consult an authorized dealer, we recommend an Authorized Mazda Dealer.

Navigation System

This navigation system utilizes GPS* satellite signals, a speed sensor and gyrosensor to track and display your vehicle's current position, and to guide you from your starting point to your destination along a calculated route.

* : GPS (Global Positioning System) is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Defense Department.

Beep sound and voice guidance restrictions while using hands-free telephone

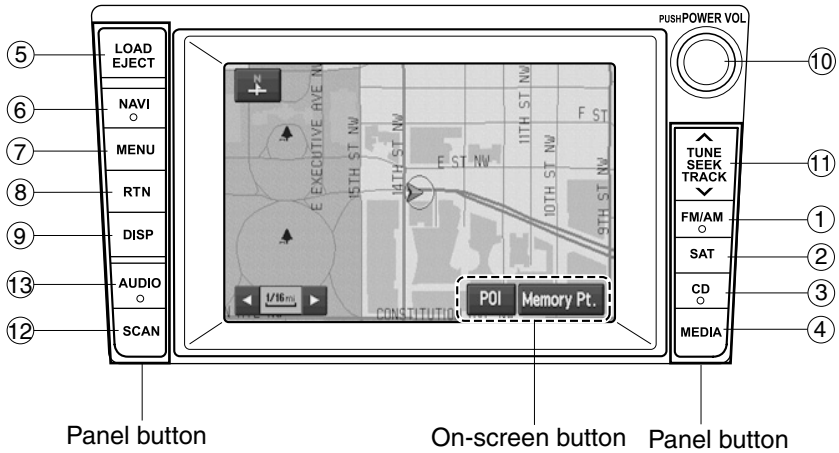
The beep sound and voice guidance related to the navigation system operation are not heard while a hands-free telephone is being used.

Screens

Screens displayed in this manual may differ from those on the actual display.

Names and Functions

The navigation system can be operated by pressing a button on the panel (panel button) or selecting a button displayed on the screen (on-screen button).



1. FM/AM button: FM/AM broadcast reception. Each time the button is pressed, the reception mode switches through three reception modes: FM 1 → FM 2 → AM.
2. SAT button: SIRIUS digital satellite radio reception.
3. CD button: CD playback.
4. MEDIA button: Image and Sound playback is possible using a portable video player connected to an external input terminal.[*1]
   Sound playback is possible using an audio player connected to an external input terminal.[*1]
   AUX1: External sound
   AUX2: External image
5. LOAD/EJECT button: CD loading and ejection.
   If the display is left in the lowered position for a certain period of time, a beep sound is heard and the display closes automatically.
6. NAVI button[*2] : Display of the navigation screen and the vehicle's present location.
7. MENU button[*2] : Menu screen display (various settings).
8. RTN button[*2] : Button used to return to the previous screen.
9. DISP button: Screen brightness/contrast mode selection and adjustment display.

10.POWER/VOLUME button: The volume can be adjusted by turning the dial. Turn the audio unit off by pressing the dial.

11.TUNE/SEEK button: Performs tuning (short press) and searching (long press) in FM/AM mode. Performs track skip (short press) and fast-forward/reverse (long press) in CD mode.

12.SCAN button: Performs scanning operation in FM/AM and CD modes.

13.AUDIO button: Audio unit-related operation screen display (preset display of FM and AM).
The on-screen touch button "SOUND" is constantly displayed at the bottom of the audio unit-related screen for displaying the sound quality adjustment screen when selected.

*1 : The external input terminal is not equipped on your vehicle because it is not standard equipment.
*2 : For navigation unit operation

Note

- If there is no response after selecting the on-screen button, remove your finger from the screen and select it again.
- On-screen buttons that cannot be operated are not illuminated.

Select the on-screen button lightly with your finger.
Selecting the on-screen buttons using objects that have a hard or sharp end such as a ball point pen or mechanical pencil could cause a malfunction.

MEMO

Activation

Insert the map disc into the unit to start the Mobile Navigation System.

Cautions

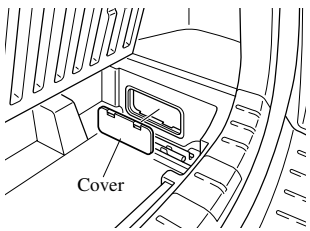
n **Map Disc**

l Refer to “Handling and Care of Map Discs” to know how to handle a map disc (☞ page 60).

Note

l The map disc cannot be inserted or ejected while the ignition switch is in the OFF position.
l Remember that the battery can run down if the ignition switch is kept in the ACC or ON position for a long time while the engine not running.

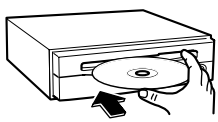
1 Remove the cover.

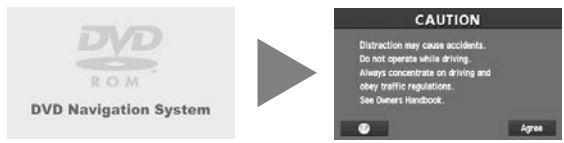


Note

l The main unit is located on the right side of the cargo sub-compartment under the trunk board.
l Condensation may form on the optical lens or the map disc inside the unit when the temperature in the vehicle increases in a short time such as when heating the car on a cold day. This condensation may cause malfunctions. If so, unload the map disc and do not operate the unit for approximately 1 hour. Wipe the condensation off the map disc with a soft cloth.
If the unit does not operate correctly after 1 hour, consult an Authorized Mazda Dealer.

2 Insert the map disc with the printed side facing up.



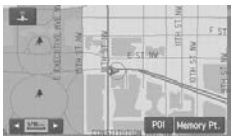


(CAUTION) screen

Note

l When the ignition switch is in the ACC or ON position, the screen changes as follows to activate the navigation system.
l The screen (audio or navigation) that was displayed prior to the engine being turned off is displayed. Before the navigation screen is displayed, the CAUTION screen will be displayed.

3 Read the CAUTION carefully, and select the Agree on-screen button.



> **Caution**
> Most functions are inhibited while the vehicle is in motion.
> Please read the handbook for operation instructions.
> Always obey traffic regulations.

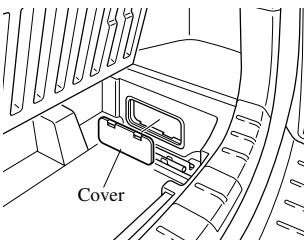
- The Current Position screen appears.

Note

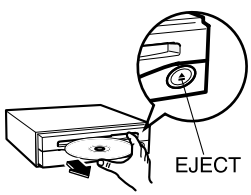
- You can select the language by selecting the on-screen button. You can also change the selected language using Language Selection. (☞ page 51)
- The CAUTION screen remains on the display unless you select the Agree on-screen button.

Removing the Map Disc

1 With the ignition switch in the ACC position, remove the cover.



2 Press ▲ (EJECT).



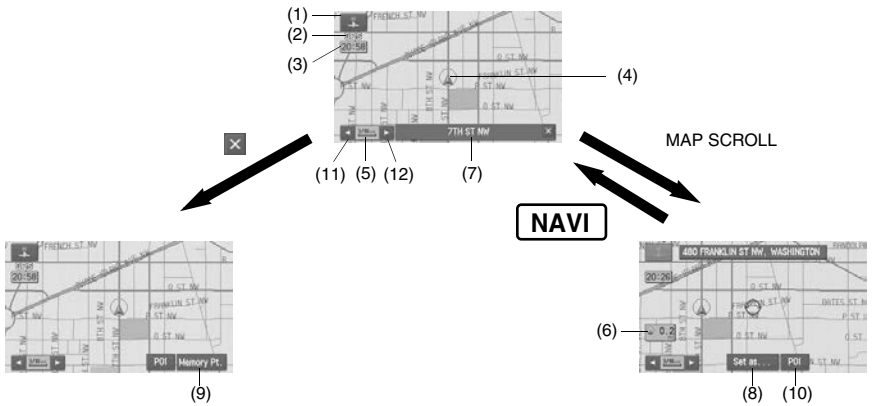
> **Caution**
> Do not get your hand or fingers caught in moving parts or in the disc slot. This can cause injuries. Children are inquisitive, try to install or remove the map disc without infants looking on.

On-screen Buttons

Select the on-screen button lightly with your finger.
Colors for unavailable buttons will be pale.

Screen Names and Functions

Screens Before Setting Route



(1) Map Orientation control
(☞ page 19)

(2) GPS (Global Positioning System) marker
(☞ page 54)

(3) Clock
Clock will be displayed when you set up Clock on Navigation Set Up On.

(4) Vehicle marker
Shows the current position and direction of your vehicle.

(5) Scale display
Displays the scale of the map.

(6) Distance from current position
Displays the distance from the current position to the position pointed by ○.

(7) Current Road Name
Shows the name of the road you are currently driving on.

(8) Set Destination button
The destination, memory point or way point will be set at the position pointed by ○ in the scroll screen.

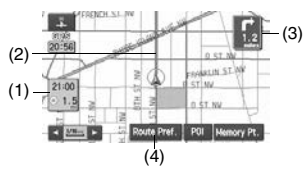
(9) Store Memory Point button
Stores markers on the map.

(10) Quick POI Display button
(☞ page 28)

(11) Zoom in
(☞ page 19)

(12) Zoom out
(☞ page 19)

Screens During Route Guidance



(1) Distance and Time to Destination display
Displays the time* and distance to the destination or way point.
Selecting this will display the next and further information on the way point or time and distance to the destination.
(* Either required time or estimated time arrival)

(2) Route display
Shows the provided route as a thick blue line.

(3) Turn Arrow display
Shows the direction to turn at the next junction and the distance to the junction.

(4) Route Preferences button
(☞ page 32)

Menu

Menu appears when pressing MENU.

Destination Entry and Route Search (☞ page 20)
Address Book (☞ page 36)
Cancel Guidance (☞ page 31)
Route Options (☞ page 32)
Volume (☞ page 42)
Navigation Set Up (☞ page 44)

Screen adjustments, beep alert and other settings

Display menu screen will be shown when you press the (DISP) button.
Press the (DISP) button to display the display menu.

n Adjusting the screen quality

- Screen brightness
  Press the + on-screen button to brighten the screen, or − to darken.
- Screen contrast
  Press the + on-screen button to increase contrast, − to decrease.
- Screen color density (During external image input after pressing the (MEDIA) button.*)
  Press the + on-screen button to increase color density, − to decrease.
- Screen color adjustment (During external image input after pressing the (MEDIA) button.*)
  Select R using the on-screen button to enhance the red intensity, or G to enhance the green.

Note

- Select the RESET on-screen button to restore the adjustment values to the default settings.
- The screen changes to SETTINGS when the SETTINGS on-screen button is selected.
- Only BRIGHTNESS and CONTRAST adjustments are available for screens other than the video screen. TINT and COLOR are also available while the video screen is displayed.

n Turning off the display

Select the DISPLAY OFF on-screen button to turn off the display.

The screen will reappear if the (NAVI) button is pressed, or the DISPLAY ON on-screen button, which is displayed on the screen when the (DISP) button is pressed, is selected.

* The external input terminal is not equipped on your vehicle because it is not standard equipment.

n Daytime/Night screen

When the headlights are on, daytime mode can also be selected (Daytime mode can also be selected while the headlights are turned on.).

n Tilt display operation

Select the on-screen button to tilt the display, to close it.
The display angle can be adjusted in three stages.
When opening, the display angle changes one stage at a time each time the on-screen button is pressed.
When closing, the display angle changes one stage at a time each time the on-screen button is pressed.

Press the (DISP) button followed by the SETTINGS on-screen button to display the settings menu.

n Returning to the navigation screen from the audio unit screen

- Select the MANUAL on-screen button to set the function to return to the navigation screen from the audio unit screen by operation of the button only.
- Select the AUTO on-screen button to set the function to return to the navigation screen from the audio unit screen automatically after 20 seconds.

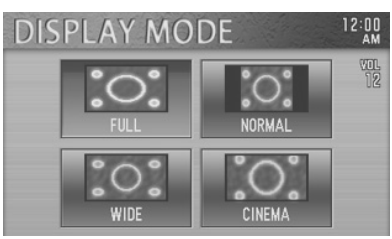
n Beep sound settings

- Select the ON on-screen button to activate the operation beep sound.
- Select the OFF on-screen button to deactivate the operation beep sound.

n Screen Size Setting

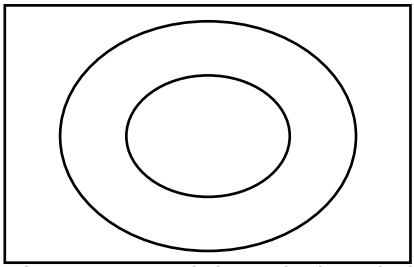
The size of the screen can be changed during external image input*.

1. Press the (MEDIA) button .
2. Select the MODE on-screen button to set the desired screen size.
3. The on-screen button of the desired screen size is selected.



n Full screen

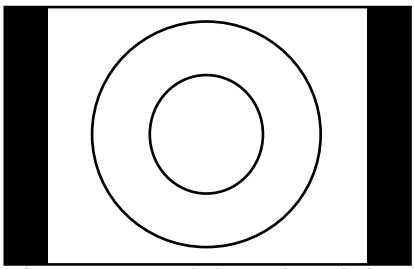
A full-screen image is displayed.



l A 16:9 screen ratio image is shown in the above figure.

n Normal screen

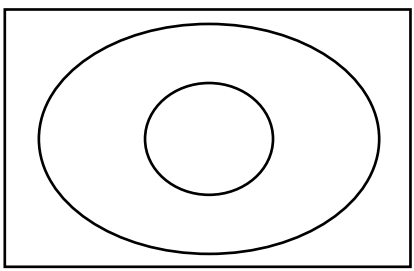
A 4:3 screen ratio image is the standard display, and black bands appear on each side of the screen.



l A 16:9 screen ratio image is scaled to a 4:3 screen ratio.

n Wide screen

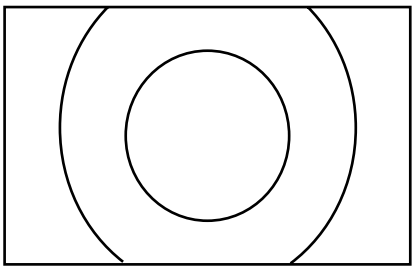
The center area of the image is compressed toward the center, and the surrounding area is enlarged toward the edge.



l A 16:9 screen ratio image is shown in the above figure.

n Cinema screen

The image is enlarged upward and downward. A 4:3 and 16:9 screen ratio image are displayed with the upper/lower part of the image cut off.



l A 16:9 screen ratio image is shown in the above figure.

Note

The display varies depending on the style of the image recorded on the disc.
Refer to the following table and set the screen size.

Image style	Recommendation
4:3	Normal or wide screen
16:9	Full screen
Letter box	Full or cinema screen

* The external input terminal is not equipped on your vehicle because it is not standard equipment.

Screen change (Changing the Map Orientation/Scale)

Warning

n **Do not keep your eyes fixed on the monitor screen or operate the system while driving**

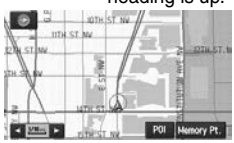
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.

Map orientation

1 **Select , on-screen button.**

l North Up: Geographic north is up.

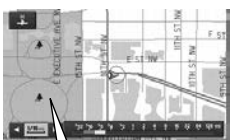
l Head Up: The direction you are heading is up.

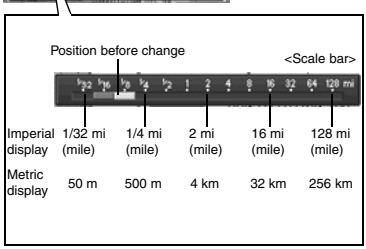


Map scale

1 **Select or on-screen button.**

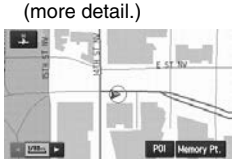
l The map can be displayed in 13 steps with scales from 1/32mi to 128mi.





l ZOOM OUT

l ZOOM IN (more detail.)



Destination Entry and Route Search

You can set the destination using various methods provided by the system.

Before Steps MENU → select Destination Entry

Change (Change Search Area)

Open the [DESTINATION ENTRY] Menu

→ **Select** Change →

Address

Open the [DESTINATION ENTRY] Menu

Select Address

When narrowing down to city name

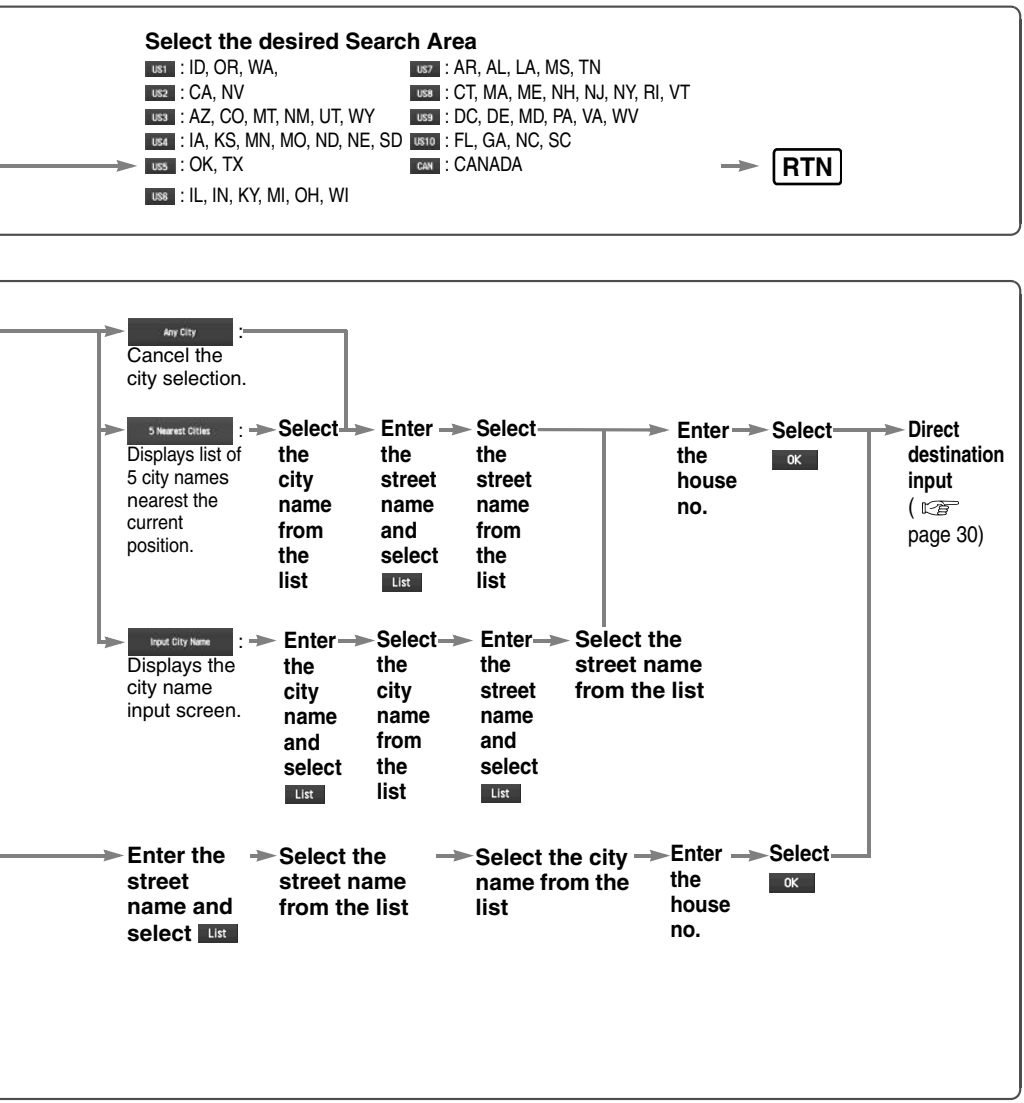
Select City

When narrowing down to street name

Select Street

Warnings

- **Do not keep your eyes fixed on the monitor screen or operate the system while driving.** Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location before operating the system.
- Route searches with the navigation system can include roads that you cannot drive on and roads that you are prohibited from driving on due to traffic regulations. Please comply with the traffic regulations.


Select the desired Search Area
US1 : ID, OR, WA,
US2 : CA, NV
US3 : AZ, CO, MT, NM, UT, WY
US4 : IA, KS, MN, MO, ND, NE, SD
US5 : OK, TX
US6 : IL, IN, KY, MI, OH, WI
US7 : AR, AL, LA, MS, TN
US8 : CT, MA, ME, NH, NJ, NY, RI, VT
US9 : DC, DE, MD, PA, VA, WV
US10 : FL, GA, NC, SC
CAN : CANADA
RTN
Any City :
Cancel the city selection.
5 Nearest Cities :
Displays list of 5 city names nearest the current position.
Select the city name from the list
Enter the street name and select List
Select the street name from the list
Enter the house no.
Select OK
Direct destination input (page 30)
Input City Name :
Displays the city name input screen.
Enter the city name and select List
Select the city name from the list
Enter the street name and select List
Select the street name from the list
Enter the street name and select List
Select the street name from the list
Select the city name from the list
Enter the house no.
Select OK

For Character Entry, please refer to page 29.

Destination Entry and Route Search

Point of interest

Open the [DESTINATION ENTRY] Menu

Select

Point of Interest

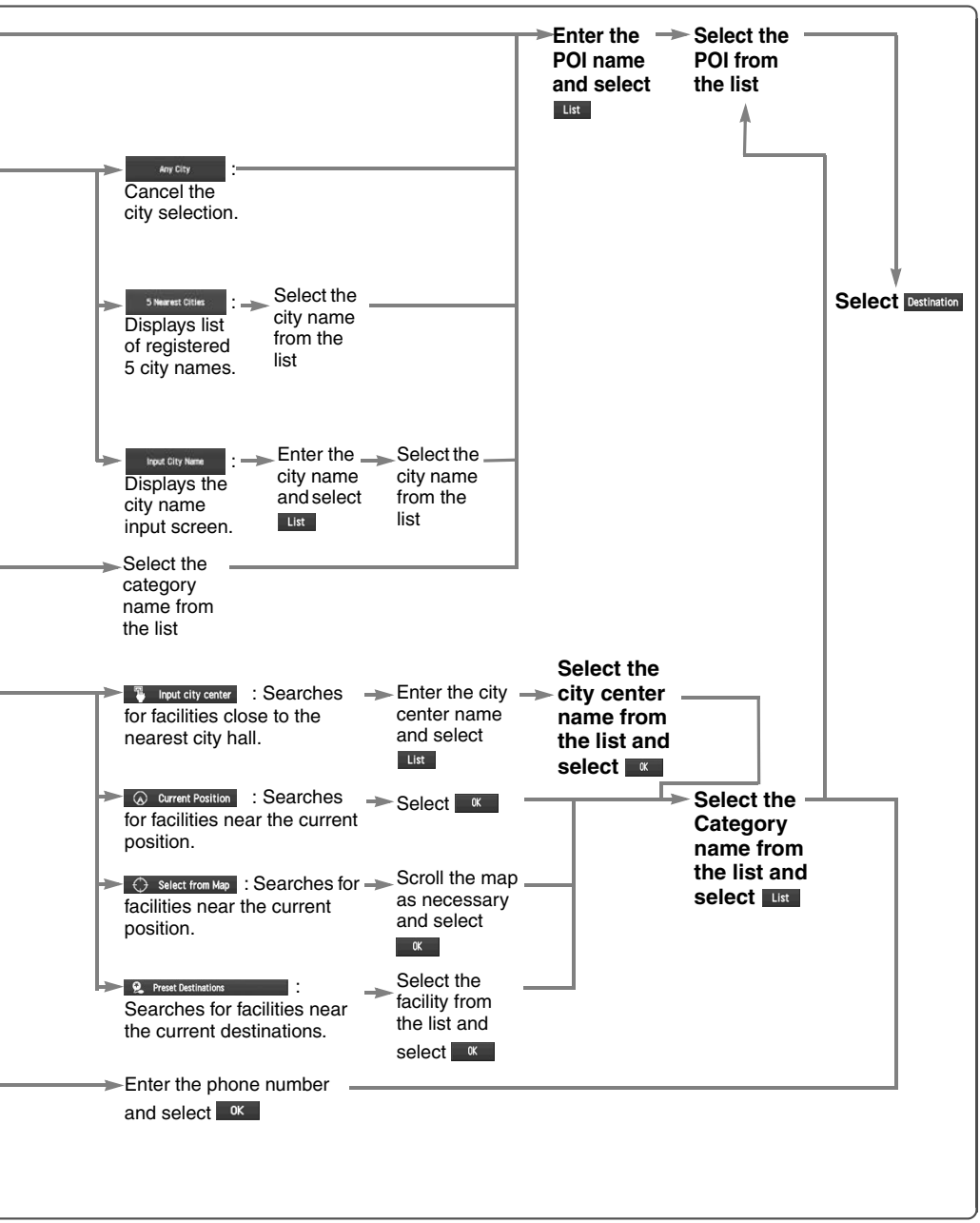
When entering the destination point directly
Select
Name

When narrowing down to city name
Select
City

When narrowing down to category name
Select
Category

When narrowing down to the nearest facility
Select
Nearest

When narrowing down to a phone number
Select
Phone Number


Enter the POI name and select List
Select the POI from the list
Any City :
Cancel the city selection.
5 Nearest Cities : Displays list of registered 5 city names.
Select the city name from the list
Input City Name : Displays the city name input screen.
Enter the city name and select List
Select the city name from the list
Select Destination
Select the category name from the list
Input city center : Searches for facilities close to the nearest city hall.
Enter the city center name and select List
Select the city center name from the list and select OK
Current Position : Searches for facilities near the current position.
Select OK
Select from Map : Searches for facilities near the current position.
Scroll the map as necessary and select OK
Preset Destinations : Searches for facilities near the current destinations.
Select the facility from the list and select OK
Select the Category name from the list and select List
Enter the phone number and select OK

For Character Entry, please refer to page 29.

Destination Entry and Route Search

Emergency

Select

When stopped

Police Station

Displays the police station select screen.

Hospital

Displays the hospital select screen.

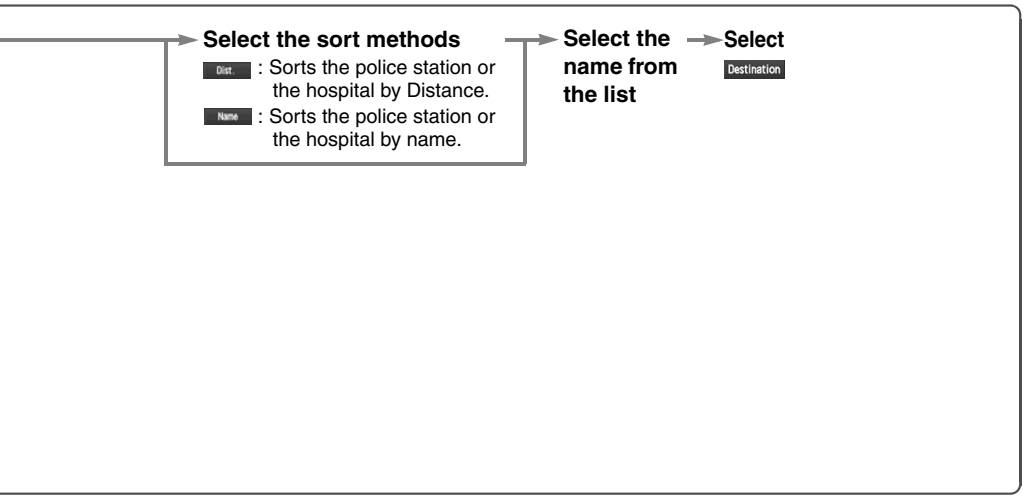
When driving

Nearby police station

Sets the destination to the nearest police station automatically.

Nearby hospital

Sets the destination to the nearest hospital automatically.


Select the sort methods
Dist. : Sorts the police station or the hospital by Distance.
Name : Sorts the police station or the hospital by name.
Select the name from the list
Select
Destination

Destination Entry and Route Search

Before Steps MENU → select Destination Entry

Memory Point

Home

Preset Destination

Previous Destination

Intersection

Freeway On/ Off Ramp

Coordinates

Select from map

Open the [DESTINATION ENTRY] Menu

→ Select Memory Point

MEMORY POINTS
Sort
1258 W VIRGINIA AVE NE, WASH
617 11TH ST NE, WASHINGTON,
578 2ND ST NW, WASHINGTON, D
2375 BRILYN PL, FALLS CHURCH
6589 36TH ST N, ARLINGTON, V

→ Select Home

→ Select Preset Destinations

→ Select Previous Destinations

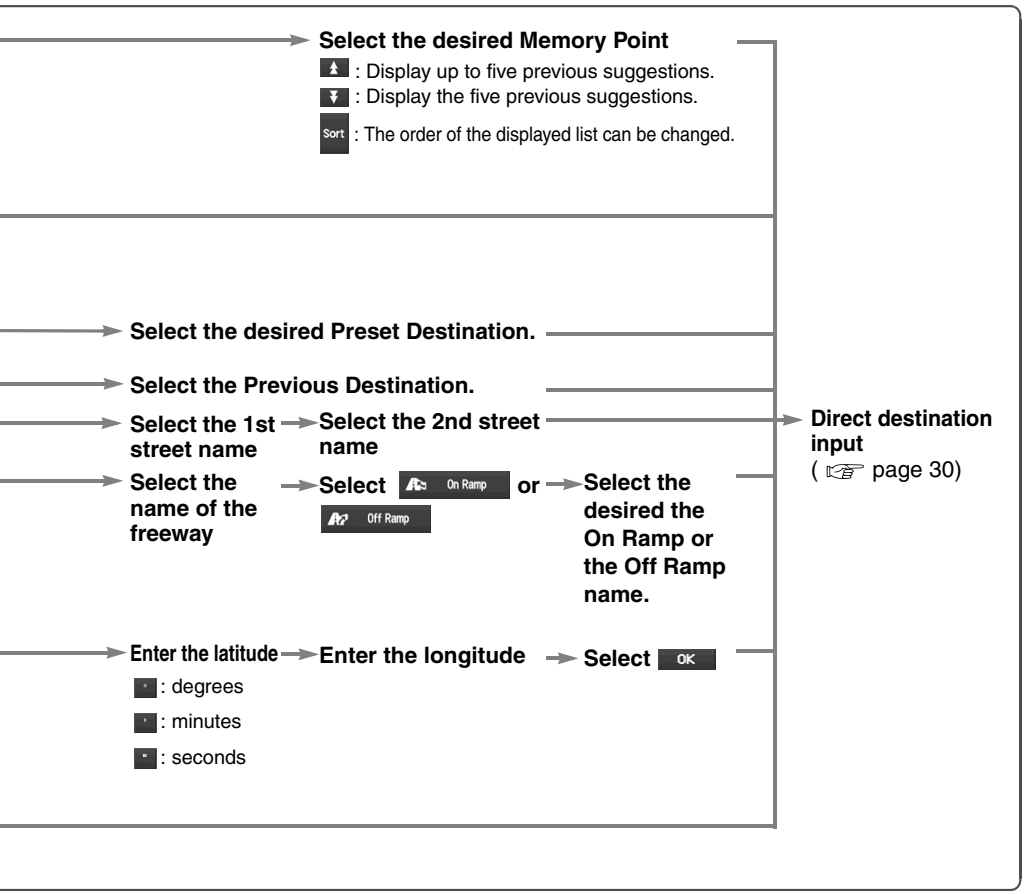
→ Select Intersection

→ Select Freeway On Ramp / Off Ramp

→ Select Coordinates

→ Select Select from Map

Routing


Select the desired Memory Point
: Display up to five previous suggestions.
: Display the five previous suggestions.
Sort : The order of the displayed list can be changed.
Select the desired Preset Destination.
Select the Previous Destination.
Select the 1st street name
Select the 2nd street name
Select the name of the freeway
Select
On Ramp
or
Off Ramp
Select the desired the On Ramp or the Off Ramp name.
Enter the latitude
Enter the longitude
Select
OK
: degrees
: minutes
: seconds
Direct destination input
(☞ page 30)

For Character Entry, please refer to page 29.

Quick POI

- You can select one of the Six Categories on the menu or List Categories and then select the POI(s) to be displayed on the map.

Before Steps Select POI

Displaying POI(s) on a Map

Open the [QUICK POI]

- **Select the categories to be displayed up to a maximum of five.** → Show
  - POI icon chart (☞ page 31)

  For categories other than the six displayed, select List Categories and select them from the list shown.
- Search Selected POI → **Select the POI you want to find from the listed categories.**
  After you make a selection, the point of interest you selected appears on the map.
  Route: Search POI along the route during the guidance and show the list.
- POI Off

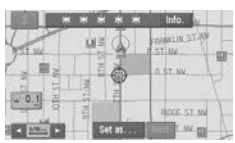
Local Search

Deleting POI Markers

Before Steps Displaying POI(s) on a Map (☞ above)

Showing POI Data

Display the POI.



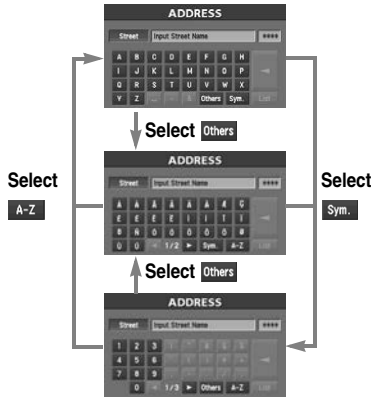
→ **Select the desired POI by moving ○ on top of the POI icon.**
The name of the selected POI appears.
If no data is stored for the selected POI, the POI name is not displayed.

→ **Select Info. (Information)**
The POI(s) data is displayed.

Character Entry

Street name, city name, and other input

Select the first several characters on the screen. (Step 1)



: Move the cursor to the previous position and delete a character.

List : The list appears.

Select your target in the list.

Names of which spelling starts with the entered character appear.

- If a desired name is not in the list, go back to Step 1, and try fewer characters.

: Display up to five previous suggestions.

: Display the previous suggestions.

: Text flow (Right)

: Text flow (Left)

Sort : The order of the displayed list can be changed. (Displayed list varies or Sort may not be displayed depending on what was input.)

Input Name : Additional text can be input. (Use when inputting additional characters after the list is displayed.)

- Examples

Street: CANAL
Enter by selecting characters:

C A

Street: MAIN STREET
Enter by selecting characters:

M A I N S

Street: 52nd Ave.
Enter by selecting characters:

5 2 n d A

House phone number, and other input

Select the characters on the screen. → Select OK

:Move the cursor to the previous position and delete a character.

Direct Destination Input

Direct Destination Input

1 **Touch the map to set the cursor to the desired destination.The map scrolls faster the further away the touched location is from the cursor.**

Scroll the map and change the map scale if necessary.

2 **Select** Set as...

3 **Select** Destination**.**

Route calculation will be carried out and the entire route will be displayed on the map.

Select Way Point (Way point) to set the address as a way point on your route (☞ page 36). You can set up to 5 way-points per trip.

4 **Select** Guide**.**

Route guidance begins using displayed route.

Note

- If your desired route cannot be found, Route opt. (Route Options) allows the route option settings to be changed. (☞ page 32)
- Selecting Guide for five seconds or more will launch the Demo mode.

Selecting Route

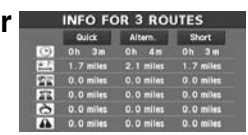
Operate after Step 3 of [Direct Destination Input]

4 The calculation route can be selected from one of three types namely, Quick (the fastest route), Altern. (the standard route), or Short (the shortest route).

5 **Select** Info. **(Information).**

Details regarding the individual routes (i.e., required time total distance, roads used, etc.)

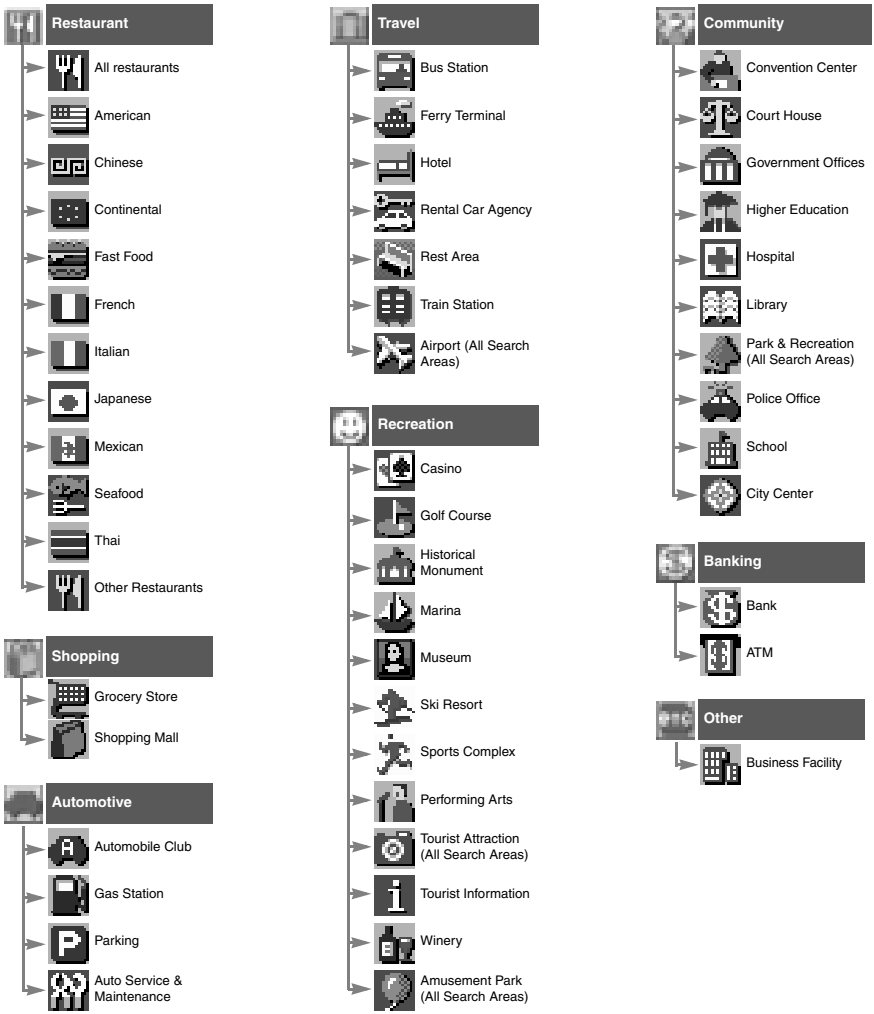
Select either Quick**,** Altern.**, or** Short**, and then select** Guide **when you have decided on the route to be used.**



POI Icons on Maps / Delete Destination

n POI (Point of Interest) Icons

The following are POI icons shown on maps.



Delete destination

MENU → Select Cancel Guidance → Select Yes

Route Options

During route guidance you can change the route options, stop or check the route.

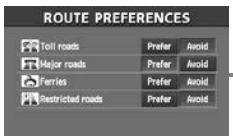
Before Steps MENU → select Route Options

Route Preferences

Open the [ROUTE OPTIONS] Menu

Select

Route Preferences



Modification of Destination or Way Point Positions

Select

Destination & Way Points

CHANGE ORDER
2197 SAMALEA TER, SILVER SPR
14 W WATKINS MILL RD, GAITHE
583 RESEARCH RD, GREENBELT,
6292 SHERIFF RD, HYATTSVILLE
DRIVEWAY, WASHINGTON, DC
916 9TH ST NW, WASHINGTON, D

Select the button for the location to be modified.

Select the way points to change the order.
Change the destination and the passing order of the destination and way points.

Deletion of Destination or Way Points

Select the button corresponding to the destination or way point to be deleted.

Detour

Select

Detour

Turn List

Select

Turn List

The Enter Route screen appears.

Warning

n **Do not keep your eyes fixed on the monitor screen or operate the system while driving**
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.

Select Prefer or Avoid for toll roads, major roads, ferry, and restricted roads.
The route will not necessarily follow the specified conditions.

Select Chg. Loc. (Change Location).
Shows the map for the destination/way points.

Move ○ to location and then select OK.

Press ▲ ▼ to change the order.

NAVI → Guide

Select Delete → Yes : → NAVI

No :Cancel the deletion

1mile 3miles 5miles : → Guide

Whole Route

Searches the detour routes at one, three, and five miles from the present position to the selected routes. (Display range varies according to the set distance of the selected route.) Whole Route searches the route that detours from the present position for all routes.

Select Avoid from the roads to be avoided. → Yes : → NAVI → Guide

No :Cancel the setting

Route Options

Before Steps MENU → select Route Options

Display Preview

Open the [ROUTE OPTIONS] Menu

Select Display Route

Route Preview

Select Route Preview

Use the buttons displayed on-screen to carry out a simulation run.

- : Move the start point.
- : Carry out a simulation run in the direction of the start point. When the Simulation starts the button will be displayed as , and when selected, it will cause the Simulation to advance quickly.
- : Stop the simulation run.
- : Carry out a simulation run in the direction of the destination. When the Simulation starts the button will be displayed as , and when selected, it will cause the Simulation to advance quickly.
- : Move to the destination.

Edit : Displays the [EDIT ROUTE PREVIEW] screen.

To next Dest. or WP : Stops at the destination or the next way-point.
To next POI : Stops at a point of interest which has been setup on the route.
Delete : Delete the POI which has been selected.
POIs: Display the six POIs from Quick-POI storage. When one of these is selected, it will be displayed on the map; furthermore, Others can be selected to display items other than shown here. For more details, refer to page 45.

RTN

Address Book

You can, edit, or delete any marked point.

Before Steps MENU → select Address Book

Memory Point Storage

Memory Point Confirmation and Modification

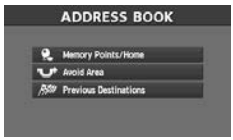
Preset Destinations or Home Storage

Memory Point Deletion

All Memory Point Deletion

Displays Icons at Memory Points

Open the [ADDRESS BOOK]



→ **Select** Memory Points/Home →

- Add
- List
- Delete
- Delete all
- **Show all icon** On or Off

Set a memory point using your preferred method.

Select a memory point to be modified

- Icon : Allows the display icon to be selected. Page 1 and 2 contain standard icons, whereas the With Sound page contains icons which also playback sounds. (With direction icon function) The beep alert only activates when the vehicle approaches to within about 500m of the memory point from the set direction.
- Name : Allows the name to be changed. When editing has been completed, select OK. Furthermore, select On to display names on the map, or Off if these names are not to be displayed.
- Position : Allows memory points to be checked and modified on the map screen. After checking. → OK
- Tel. : Allows the telephone number to be modified. When editing has been completed, select OK.

Select a memory point to be stored in Preset Destinations or Home.

Category : Allows the storage category to be changed. Select the button corresponding to the new category.

- Preset Destinations : Changes the category to Preset Destinations
- Home : Changes the category to Home

Select a memory point to be deleted.

- Yes
- No : Cancel the deletion.

Yes

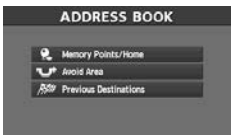
No : Cancel the deletion.

Address Book

Before Steps MENU → select Address Book

- Avoid Area Storage
- Avoid Area Confirmation and Modification
- Avoid Area Deletion
- All Avoid Area Deletion
- Category Name Modification
- Previous Destination Deletion
- All Preset Destination Deletion

Open the [ADDRESS BOOK]

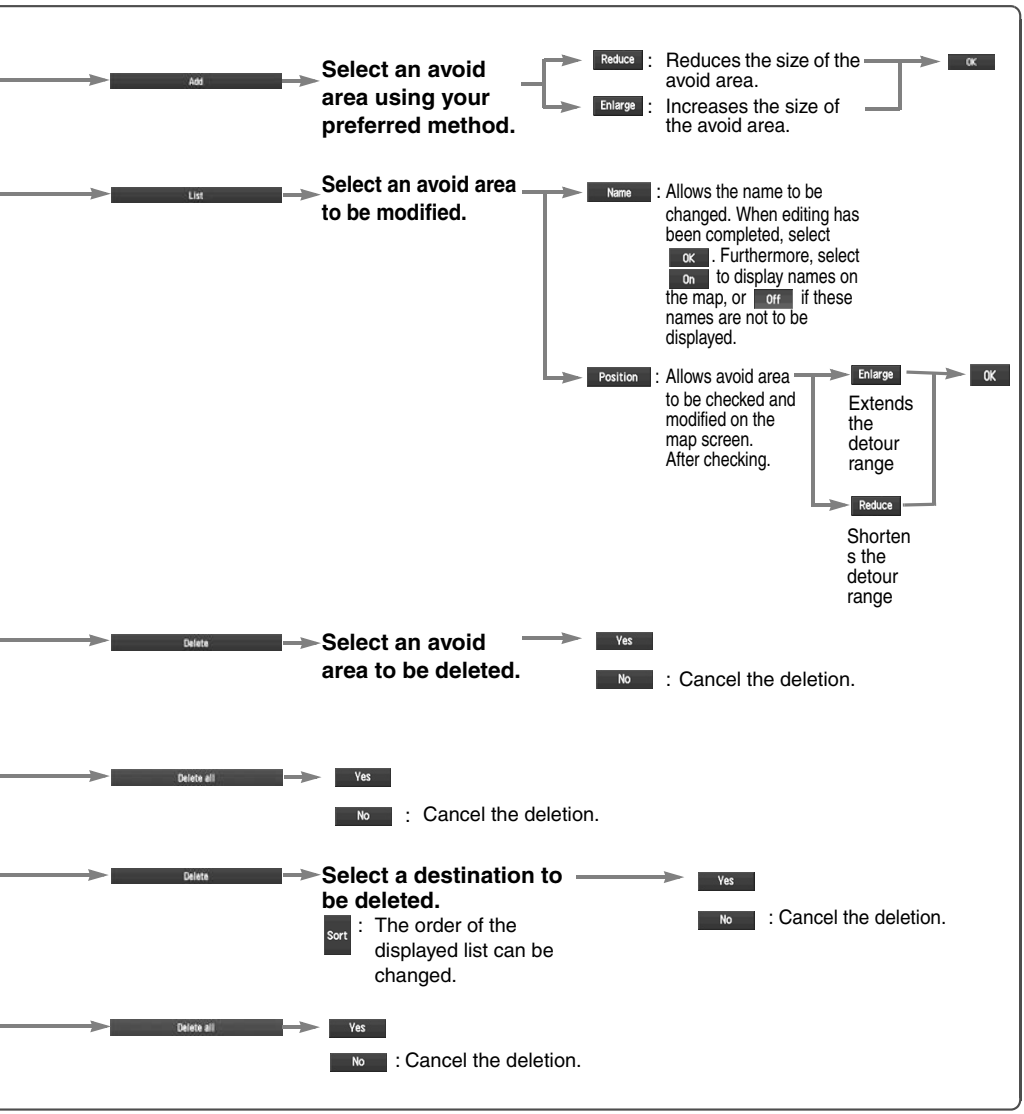


Select

Avoid Area

Select

Preset Destinations


Add
Select an avoid area using your preferred method.
Reduce : Reduces the size of the avoid area.
Enlarge : Increases the size of the avoid area.
OK
List
Select an avoid area to be modified.
Name : Allows the name to be changed. When editing has been completed, select OK. Furthermore, select On to display names on the map, or Off if these names are not to be displayed.
Position : Allows avoid area to be checked and modified on the map screen. After checking.
Enlarge
Extends the detour range
Reduce
Shortens the detour range
OK
Delete
Select an avoid area to be deleted.
Yes
No : Cancel the deletion.
Delete all
Yes
No : Cancel the deletion.
Delete
Select a destination to be deleted.
Sort : The order of the displayed list can be changed.
Yes
No : Cancel the deletion.
Delete all
Yes
No : Cancel the deletion.

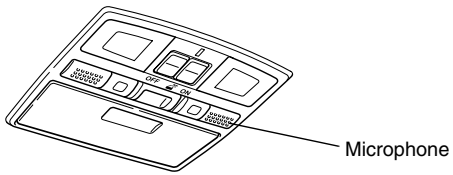
Voice Recognition

Voice control can be carried out by simply Pressing VOICE switch on the steering wheel switch and using a voice command (☞ page 41) spoken into the microphone.

Voice Recognition Structure

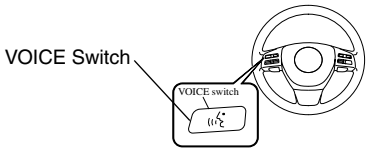
Microphone surface

Voice entry recognition.



VOICE switch on the steering wheel switch

Use for switching to voice recognition or canceling.



Language Select

Set up the language in advance.

1 **Press MENU**

2 **select** Navigation Set Up →

select Language → **select**

3 **Select your preferred language from the list.**

Note

To return to current position screen, press **NAVI**.

Basic Usage Pattern

1 **Press VOICE switch on the steering wheel switch.**

2 **Speak the desired voice command.**

Cancel Voice Recognition

1 **Long press VOICE switch on the steering wheel switch. (Press it more than 0.7 second.)**

Avoiding Voice Recognition Errors.

Read the notes listed below to allow the Voice Recognition function to recognize your voice properly.

- Speak a voice command clearly.
- Keep yourself in a safe driving position. Do not face or approach the microphone to make your voice command recognizable.
  Voice recognition may fail to recognize your command due to voice tone. If this happens, change the tone of your voice by speaking more loudly and clearly.
- Keep the inside of the vehicle quiet when making a voice command. Your command may be compromised by noises made by people, blinkers, the horn, vehicle vibration, and noises from outside the vehicle.
- Use the language you selected in voice recognition.

Please be aware that the voice recognition may error or not function despite following the above points.

Note

VOICE switch cannot be used while a hands-free telephone is being used.

Voice Recognition Command

The following voice commands can be used with voice control.

Shortcut Commands
[Show] **Current** (Position/Location)
[Show] **Map**
Repeat [Voice] [Guidance]
Cancel
Map Operation Commands
Zoom In
Zoom Out
Zoom In Maximum
Zoom Out Maximum
Right Map Zoom In
Right Map Zoom Out
Right Map (Zoom In Maximum/ Minimum Scale)
Right Map (Zoom Out Maximum/Maximum Scale)
[Change to/Show] **North up** [Mode]
[Change to/Show] **Heading up** [Mode]
[Change] **Map Direction**
Right Map [Change to/Show] **North up** [Mode]
Right Map [Change to/Show] **Heading Up** [Mode]
Right Map [Change Map] **Direction**
[Show/Change to] **Dual Map** [Mode]
[Show/Change to] **Single Map** [Mode]
(Store/Mark) [This Point]
POI Display Commands
Automobile Club
Gas Station/Gas
Parking/Parking Lot/Parking Garage/Car Park
Auto Service & Maintenance/Auto Service
ATM
Bank
Town Center/City Center
Convention Center/Exhibition Center
Court House
Government Offices
Higher Education/University/College
Hospital
Library
Parks & Recreation/Park & Recreation
Police Station

School
Amusement Park
Casino
Golf Course
Historical Monument
Marina
Museum
Ski Resort/Skiing
Sports Complex/Stadium
Performing Arts
Tourist Attraction
Tourist Information
Winery
Restaurant/I'm Hungry/Show Restaurant
American Restaurant/American Food
Chinese Restaurant/Chinese Food
Continental Restaurant/ Continental Food
Fast Food/Fast Food Restaurant
French Restaurant/French Food
Italian Restaurant/Italian Food
Japanese Restaurant/Japanese Food
Mexican Restaurant/Mexican Food
Seafood Restaurant/Seafood
Thai Restaurant/Thai Food
Other Restaurant/Other Food
Grocery Store
Shopping Mall
Airport
Bus Station
Ferry Terminal
Hotel
Rental Car Agency
Rest Area
Train Station
Business Facility
POI Off
Destination Operation Commands
[Go] **Home**
Enter Destination
Add to Waypoint

(Go to/Previous) **Starting Point**
[Go to] **Previous Destination**
[Go to] **Preset Destination** [Number] 1
[Go to] **Preset Destination** [Number] 2
[Go to] **Preset Destination** [Number] 3
[Go to] **Preset Destination** [Number] 4
[Go to] **Preset Destination** [Number] 5
Cancel
Guidance Commands
Louder
Softer
[Show] (Whole/Entire) **Route** [Map]
[Show] **Next Way Point** [Map]
Show First Way Point [Map]
Show Second Way Point [Map]
Show Third Way Point [Map]
Show Fourth Way Point [Map]
Show Fifth Way Point [Map]
Show Destination [Map]
(Delete/Cancel) **Next Way Point**
Yes
No
(Delete/Cancel) **Destination**
(Delete/Cancel) **All Way Points and Destination**
Voice Guidance Off
Voice Guidance On
Quick
Alternative
Short
Detour
Detour Entire Route
[Change to] **Arrow** (Guide/Guidance)
[Change to] **Turn List** (Guide/Guidance)
[Change to] **Freeway** (Guide/Guidance)
[Change to] **Intersection** (Guide/Guidance)
Display Commands
display [set] **day** [mode]
display [set] **night** [mode]
display [set] **auto** [mode]

( ): Indicates the commands to be the object of "/"
[]: Recognizes without saying the command in "[]"
"/": Recognizes when saying either commands before and after "/"

Volume Adjustment

You can adjust the volume control for the voice guidance.

Before Steps MENU → select Volume

Open the [VOLUME] screen

1 **Select the appropriate button to set the volume to between 1 (minimum) and 7 (maximum).**

Off :Sound output will be muted.

2 **Press the (NAVI) button to return to the current vehicle position screen.**

MEMO

Navigation Set Up

l You can alter the map display conditions, the route guidance conditions and show the system information.

Warning

n **Stop your vehicle before the following operations.**
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident.
Always stop the vehicle in a safe location and put the parking brake on before operating the system.

Before Steps MENU → select Navigation Set Up

Open [NAVIGATION SET UP]

- User Settings (☞ page 45)
- Quick POI Selection (☞ page 47)
- Language (☞ page 51)
- Map Configuration (☞ page 52)
- Calibration (☞ page 48)
- Restore System Defaults (☞ page 50)

Navigation Set Up

User Setting

Before Steps

MENU → select Navigation Set Up

→ select User Settings

Open the [USER SETTINGS] screen

USER SETTINGS
Map Color 1 2 3
Map Mode Auto Day Night
Distance km Miles
Average Speed Change speed
Road Restriction Warnings On Off

n Map Color

Map Color 1 2 3

Select a screen color from 1 to 3 options.

n Map Mode

Map Mode Auto Day Night

- Auto : The display will automatically switch between Day and Night illumination mode when the headlights are turned off and on respectively.
- Day : The display will be presented in Day illumination mode regardless of whether the headlights are on or off.
- Night : The display will be presented in Night illumination mode regardless of whether the headlights are on or off.

n Distance

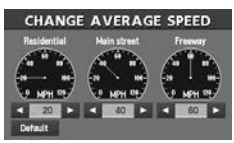
Distance km Miles

Select the distance unit from km or Miles.

n Average Speed

Average Speed Change speed

Set the average speed for each road to be driven.
(This function sets the standard speed (average vehicle speed for each route) used for calculating the estimated arrival time when calculating the route time.)



◀:▶ Average speed setting

Default :Changes back to default

n Road Restriction Warnings

Road Restriction Warnings On Off

The display of warnings during route guidance when passing through areas with traffic restrictions can be turned on or off.

Navigation Set Up

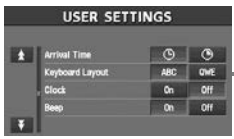
User Setting

Before Steps

MENU → select Navigation Set Up

→ select User Settings

Open the [USER SETTINGS] screen



n Arrival Time

Arrival Time

The time which is displayed until reaching the destination or a way point can be set as an estimated arrival time or the remaining time.

Select to display the estimated arrival time, or to display the remaining time.

n Keyboard Layout

Keyboard Layout ABC QWE

The layout of input keys can be selected as ABC or QWE.

n Clock

Clock On Off

Allows selection of whether clock is to be displayed.
When the time display setting is switched on in the "USER SETTINGS" screen on the navigation screen, the time will be displayed on the navigation, SETTINGS, SOUND, LOAD/EJECT, and DISPLAY MODE screens.

n Beep

Beep On Off

Allows selection of whether beep will sound.

Navigation Set Up

Quick POI Selection

This function allows you set the categories on the area displayed when the (Point of Interest) menu is selected on the map. Quick POI enables you store up to six different kinds of categories which you use most regularly.

1 MENU → select Navigation Set Up

2 Select Quick POI Selection

Open the [QUICK POI SELECTION] screen

Select the button for Quick POI storage.

Note

- Select the category to be changed

Default : This button allows you to restore the factory settings.

Select a category.

Once selected, subcategories will be displayed.

List All Categories : Subcategories from all of the individual categories will be displayed together.

Select the subcategories to be displayed on the map.

Repeat the above steps to add further POI markers displayed on the menu.

Navigation Set Up

Calibration

This function allows you to correct any error in the position or direction of your vehicle display.

Before Steps MENU → select Navigation Set Up

Adjusting Current Position and Direction

select Position / Direction

Open the [Calibrate Position] screen

Move ○ to the correct position and select OK.

Use ◀ or ▶ to adjust the direction in which you are heading, and select OK.

Distance

This function automatically corrects any error in the display of the current position that might occur after tire replacement.

select Distance

You will have to drive about 6 miles (10 km) before distance correction is complete.

Set Clock

The current time is set using this function. Since time notification is provided by a GPS satellite.

select Set Clock

Open the [SET CLOCK] screen

Select 24H if you prefer 24-hour display; 12H for 12-hour display.

Select +1 hour to move the setting ahead by one hour, and similarly, select -1 hour to move it back by one hour.

How to exit OK.

Note

Minutes are adjusted by the GPS, however, it is necessary to adjust hours under the following conditions:

- Driving across different time zones
- Daylight saving time start and end

Map Version

The map and software version numbers can be confirmed using this function.

select Map Version

Map and software versions are now displayed.

Navigation Set Up

Restore System Defaults

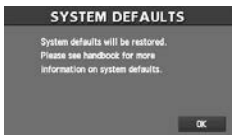
This function replaces all the settings in the mobile navigation system with the initial default settings.

Before Steps

MENU → select Navigation Set Up

→ select Restore System Defaults

Open the [SYSTEM DEFAULTS] screen



Select OK **.**

If you execute Restore System Defaults, all of your stored setting data will be deleted.

[Default List]

Item	Initial condition
Menu names	
Map Orientation	North up
Map display mode	Single-screen display
Map Display scale/Map scale for Dual-screen is not object of backup.	Single-screen: 10,000 map (1/16 mi)
Display guidance language	English
Quick-POI map display	All Off
Quick-POI Selection	A : Gas station B : ATM C : Police Station D : Grocery store E : All Restaurant F : Hotel
Search Area	US9 (including Washington DC)
Map Color	1
Day/Night/Auto Setting	Auto
Distance Units (Miles/KM) (Global setting)	Miles
Volume Presets	4
Time display change (12h/24h)	24h
Keyboard layout	ABC
Arrival Time	Time
Navigation Setup (Clock)	Off
Navigation Setup (Beep)	On
Map Configuration	
Freeway Information	Off
Junction Detail	ON
Map screen	Single
Turn Guidance Screen	Turn List

Navigation Set Up

Language

You can change the language of the menu and the voice guidance.

Before Steps

MENU → select Navigation Set Up

→ select Language

Open the [LANGUAGE] screen

Select your preferred language from the list.

Navigation Set Up

Map Configuration

Before Steps

MENU → select Navigation Set Up

→ select Map Configuration

Open the [MAP CONFIGURATION] screen

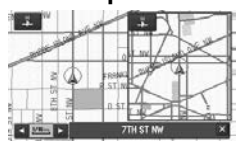
n Map Screen

Map Screen

Select single or dual map display.

Single map

Dual map



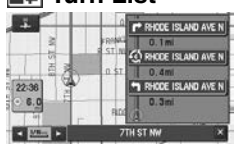
n Turn Guidance

Turn Guidance

Turn Arrow (on first screen)

While using route guidance, the directions for the next junction where you have to turn are shown as a Turn Arrow in the upper right.

Turn List



While using route guidance, the directions for the next junction where you have to turn are shown as a Turn List.

Turn Arrow (on second screen)

While using route guidance, the directions for the next junction where you have to turn are shown as Turn Arrow.

Note

Before a fork in the road, an enlarged diagram of the junction automatically appears in a second screen.This is to make route guidance even clearer.

n Junction Detail

Junction Detail On Off

Select whether the Enlarged Junction diagram screen is displayed automatically.

n Freeway Information

Freeway Information On Off

Allows selection of whether the guidance screen is to be displayed while driving on a freeway.

Precautions/System Performance

Voice Guidance

Warnings

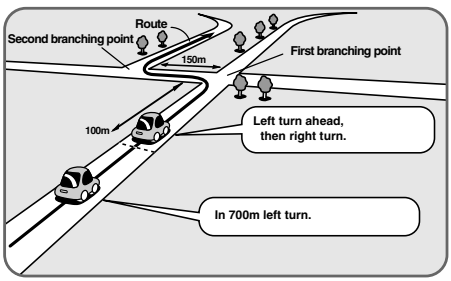
- The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable at times to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting an urgent destination such as a hospital or a police station.
- Your route may sometimes include roads that are not open to vehicles or are closed due to traffic regulations. Please comply with the local traffic regulations.
- Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.

Voice guidance has the following functions:

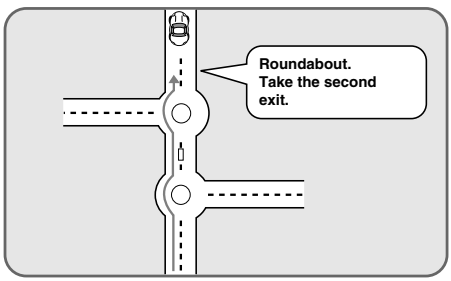
n Intersection guidance

- The system voice announces the distance to an upcoming turn and the turning direction.
  ➡ This guidance function is automatic. Therefore, you do not have to set it, and it cannot be disabled.

- The system vocally announces the distance to an upcoming highway branching point or junction.

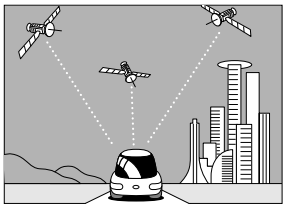


When two intersections are close together, the voice guidance may be late.



When two roundabouts are close together, the voice guidance for the second may be late.

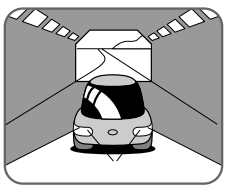
GPS

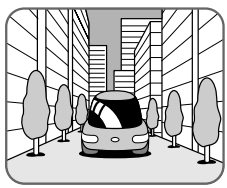


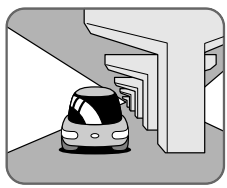
GPS is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Department of Defense. The Mobile Navigation System uses input from three or more satellites and calculates the vehicle position based on the principle of triangulation.
The positioning accuracy of the system corresponds to the error display of the GPS which is from about 30 to 200 meters.

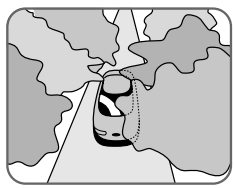
- If you are using the system for the first time, or if you have not used it for some time, it takes about 5 minutes (or about 2 minutes in open areas) to calculate your vehicle's position.

n GPS signal reception is poor in the following places


In tunnels


Among high-rise buildings


Under elevated roads

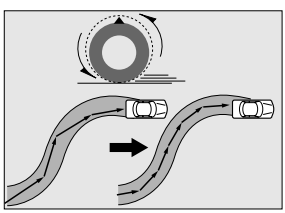

In wooded areas

- The GPS satellites are controlled by the U.S. Defense Department, which may intentionally lower positioning accuracy. In such cases, there may be vehicle position deviations.
- There may be vehicle position deviations for some time until GPS signals are received after turning on the ignition.

Map Matching

This function compares your vehicle's tracking data with the road data on the map disc, applies dead reckoning to determine the road you are driving on, and displays your vehicle on that road on the map.

- Intelligent map matching addresses the following problems to achieve high accuracy in vehicle positioning.



Position Correction for Elevated Roads
Position accuracy is improved by detecting if the vehicle is running on or under an elevated road.

Position Correction for Parking Garages
Position accuracy is improved by detecting if the vehicle is driving in an elevated or underground parking garage.

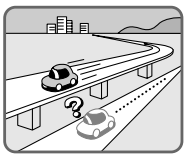
High-precision Gyrosensor
A gyro detects turns with an accuracy of 0.05° per second. Combined with a speed sensor, it enables the system to display the current vehicle position even where GPS signals may be blocked.

- Using a spare tire in place of the regular one may cause vehicle position deviations.
- Any difference between the direction which your vehicle actually travels and that shown on the map is automatically eliminated by azimuth correction.

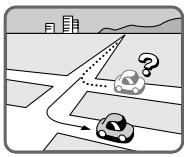
Precautions/System Performance

Positioning Accuracy

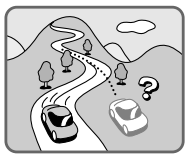
In the following situations, your vehicle position may not be displayed correctly on the map. But, as you keep driving, your vehicle position will be automatically corrected utilizing map matching and GPS data.



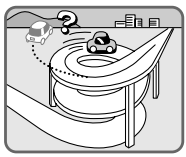
Running on an elevated road



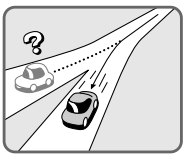
Making a turn after driving on a long straight road



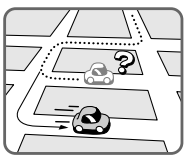
Running on a steep mountain road



Running on a spiral road

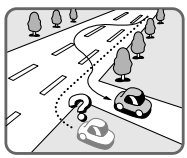


Entering an intersection where a road branches off at a small angle

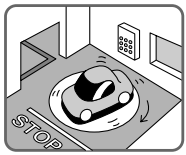


Running on gridiron layout of roads

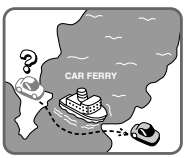
Running on a slippery road with tire chains



Snaking on a wide road



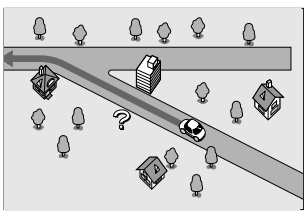
When your vehicle is on a turntable with the ignition turned off



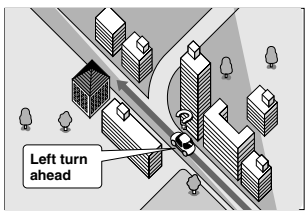
After getting off a ferryboat or vehicle train

Route Guide

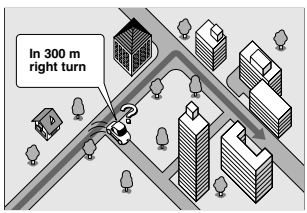
Although you may encounter the following problems in route guide, there is nothing wrong with the system.



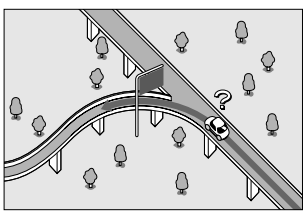
For certain intersection shapes, the upcoming turn or the name of the intersection may not be announced.



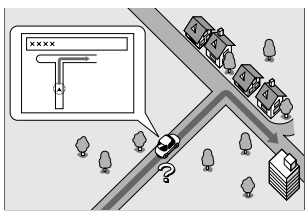
For certain intersection shapes, you may be prompted to turn right or left When you should actually stay on the same road.



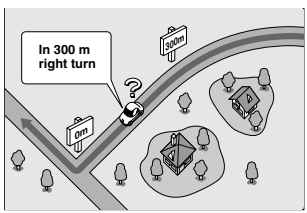
Voice guidance for the planned route may continue even after you have deviated from that route such as having turned too early.



Some points where the road divides on highways or toll roads may not be displayed or announced.



The Intersection Zoom Map may not always agree with the actual shape of the intersection.



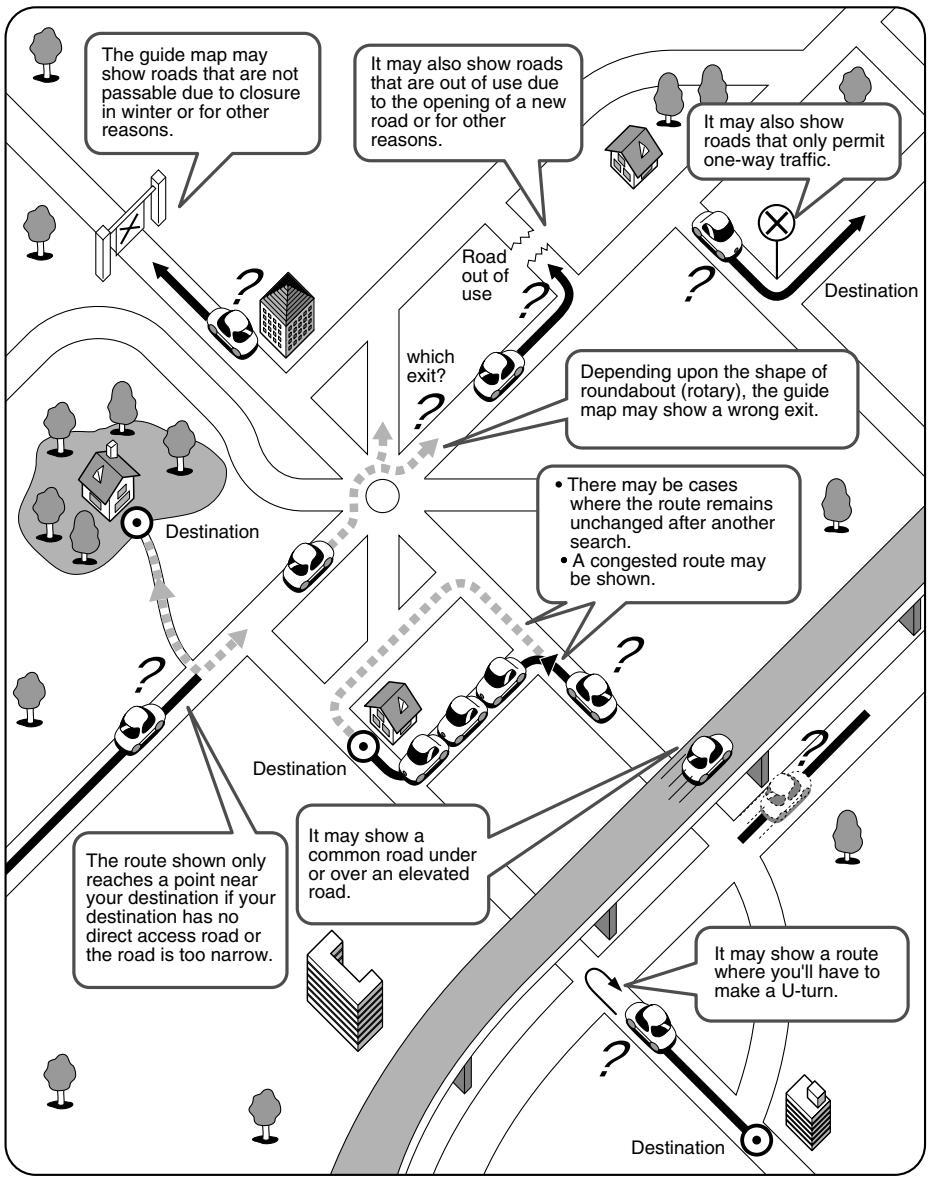
The announced distance to an upcoming turn may differ slightly from reality.

Warning

The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting an urgent destination such as a hospital or a police station.

Route Search

Although you may encounter the following problems in a route search, there is nothing wrong with the system.


The guide map may show roads that are not passable due to closure in winter or for other reasons.
It may also show roads that are out of use due to the opening of a new road or for other reasons.
It may also show roads that only permit one-way traffic.
Road out of use
Destination
which exit?
Depending upon the shape of roundabout (rotary), the guide map may show a wrong exit.
Destination
• There may be cases where the route remains unchanged after another search.
• A congested route may be shown.
Destination
The route shown only reaches a point near your destination if your destination has no direct access road or the road is too narrow.
It may show a common road under or over an elevated road.
It may show a route where you'll have to make a U-turn.
Destination

Troubleshooting

Verification First

Note

There may be some problems due to operational errors or mistakes. Please read this manual again and verify that there really is a problem before calling an Expert Dealer, we recommend an Authorized Mazda Dealer to ask for repair services.

Symptom	Check point
No picture	l Check if a fuse has blown. ➡ Consult an Expert Dealer, we recommend an Authorized Mazda Dealer.
Display does not open or close	l Check if the voltage level of the vehicle battery is low. ➡ Recharge the battery or change batteries.
The vehicle position is not correct	l Check if the vehicle position changed when ACC was set to OFF. When, for example, • The vehicle was transported by a ferry boat. • The vehicle was rotated on a turn table in a parking lot. • The vehicle was transported by a tow track or other such vehicle. ➡ Drive the vehicle for a while where you are receiving GPS signals.

Symptom	Check point
No GPS symbols are displayed	l GPS signals may not be received because of obstructions. After moving the vehicle away from obstructions, the GPS signals can be received.
The vehicle position is not displayed	l Check if the mode is set to the current position screen. ➡ Press **NAVI**
No voice guidance	l Check if the volume control for the voice guidance has been turned off. l Check if the vehicle is off the route. ➡ Repeat the route search while checking the route guide screen. l Check if you are driving the vehicle in the wrong direction on the route. ➡ Repeat the route search checking the direction of the destination.
Buttons on the remote control do not beep	l Check if [Beep] is set to [Off] (☞ page 46).

Troubleshooting

Error Messages

Error message	Solution
Please insert a MAP DVD.	❙ The disc is not installed. ➡ Check if the disk is installed. If installed, check if the installed disk is correct.
MAP DVD-Read Error **The disc installed is not a MAP DVD.**	❙ The disc is wet, dirty, scratched, or upside down, or the disc cannot be played with this unit or the incorrect disk is installed. ➡ Eject the disc and check it.

Maintenance

Care of the Product

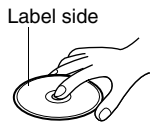
n **Cleaning this product**
Use a dry, soft cloth to wipe it.

n **Cautions for cleaning**
Never use solvents such as benzene and thinners, they could mar the surface of the unit.

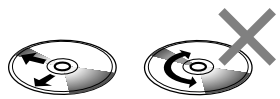
n **Map disc**
If you require the latest map disc, consult an Expert Dealer, we recommend an Authorized Mazda Dealer.

Handling and Care of Map Discs

n **How to hold the disc**
- Do not touch the underside of the disc.
- Do not scratch the disc.
- Do not bend the disc.
- When not in use, keep the disc in the case.



n **Disc Cleaning**
- Use a dry, soft cloth to wipe from the center outward.



n **Do not leave discs in the following places:**
- Direct sunlight
- Near car heaters
- In dirty, dusty and damp areas
- On seats and dashboards

Contents

Audio system

- Audio Operation
  - Operating Tips for Audio system 62
    (Radio Reception), (Operating Tips for In-Dash CD Changer), (Operating tips for MP3), (CD-TEXT)
  - Operating Tips for Display 68
  - Beep sound and voice guidance restrictions while using hands-free telephone 68
  - Power/Volume/Sound Controls 69
    (Power ON/OFF), (Volume adjustment), (Audio sound adjustment), (Sound quality adjustment), (Volume balance adjustment), (AudioPilot™), (Centerpoint®), (Rear seat-optimized (With Rear Entertainment System)), (Surround)
  - Operating the Radio 72
    (Radio ON), (Band selection), (Tuning), (Manual tuning), (Seek tuning), (Scan tuning), (Preset channel tuning), (Auto memory tuning), (Audio Sound Adjustment), (Satellite Radio (SAT))
  - Operating the In-Dash CD Changer 75
    (Inserting the CD), (During CD playback), (During MP3 CD playback), (Normal insertion), (Inserting CDs into desired tray number), (Multiple insertion), (Normal ejection), (Ejecting CDs from desired tray number), (Multiple ejection), (Playing), (Fast-forward/Reverse), (Track search), (Disc search), (Folder search (during MP3 CD playback)), (Music scan), (Repeat play), (Audio sound adjustment), (Operating tips for audio control switch), (Safety Certification)

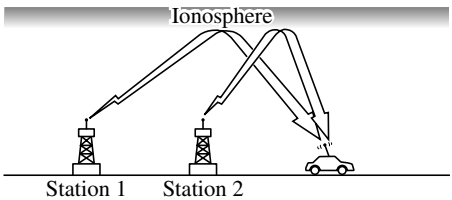
Audio Operation

Operating Tips for Audio system

n Radio Reception

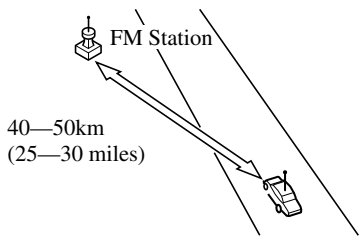
AM characteristics

AM signals bend around such things as buildings or mountains and bounce off the ionosphere. Therefore, they can reach longer distances than FM signals. Because of this, two stations may sometimes be picked up on the same frequency at the same time.



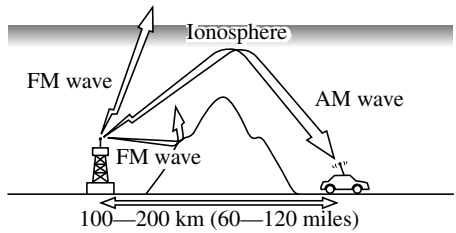
FM characteristics

An FM broadcast range is usually about 40–50 km (25–30 miles) from the source. Because of extra coding needed to break the sound into two channels, stereo FM has even less range than monaural (non-stereo) FM.



Signals from an FM transmitter are similar to beams of light because they do not bend around corners, but they do reflect.

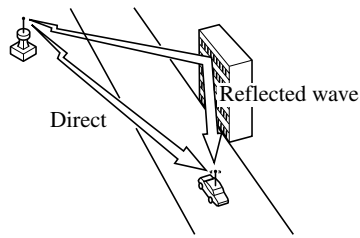
Unlike AM signals, FM signals cannot travel beyond the horizon. Therefore, FM stations cannot be received at the great distances possible with AM reception.



Atmospheric conditions can also affect FM reception. High humidity will cause poor reception. However, cloudy days may provide better reception than clear days.

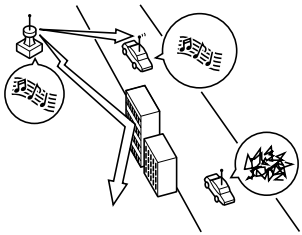
Multipath noise

Since FM signals can be reflected by obstructions, it is possible to receive both the direct signal and the reflected signal at the same time. This causes a slight delay in reception and may be heard as a broken sound or a distortion. This problem may also be encountered when in close proximity to the transmitter.



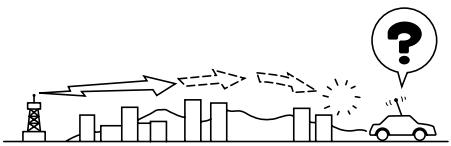
Flutter/Skip noise

Signals from an FM transmitter move in straight lines and become weak in valleys between tall buildings, mountains, and other obstacles. When a vehicle passes through such an area, the reception conditions may change suddenly, resulting in annoying noise.



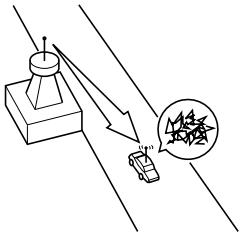
Weak signal noise

In suburban areas, broadcast signals become weak because of distance from the transmitter. Reception in such fringe areas is characterized by sound breakup.



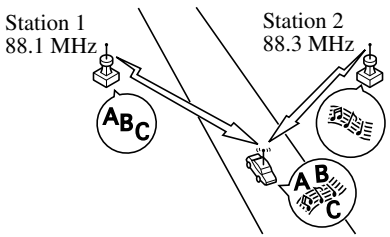
Strong signal noise

This occurs very close to a transmitter tower. The broadcast signals are extremely strong, so the result is noise and sound breakup at the radio receiver.



Station drift noise

When a vehicle reaches the area of two strong stations broadcasting at similar frequencies, the original station may be temporarily lost and the second station picked up. At this time there will be some noise from this disturbance.



n Operating Tips for In-Dash CD Changer

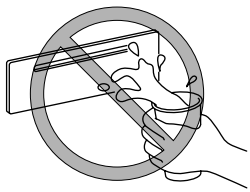
Condensation phenomenon

Immediately after turning on the heater when the vehicle is cold, the CD or optical components (prism and lens) in the In-dash CD changer may become clouded with condensation. At this time, the CD will eject immediately when placed in the unit. A clouded CD can be corrected simply by wiping it with a soft cloth. Clouded optical components will clear naturally in about an hour. Wait for normal operation to return before attempting to use the unit.

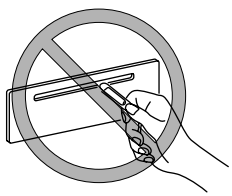
Handling the In-dash CD changer

The following precautions should be observed.

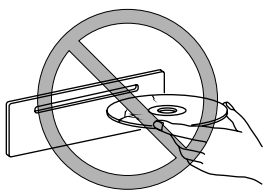
- Do not spill any liquid on the audio system.



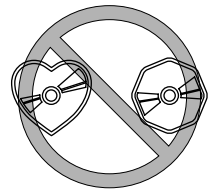
- Do not insert any objects, other than CDs, into the slot.



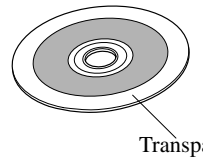
- The CD revolves at high speed within the unit. Defective (cracked or badly bent) CDs should never be used.



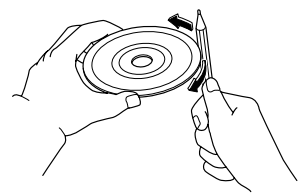
- Do not use non-conventional discs such as heart-shaped, octagonal discs, etc. The disc may not eject resulting in a malfunction.



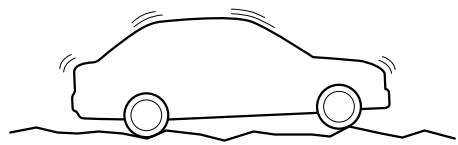
- If the memory portion of the CD is transparent or translucent, do not use the disc.



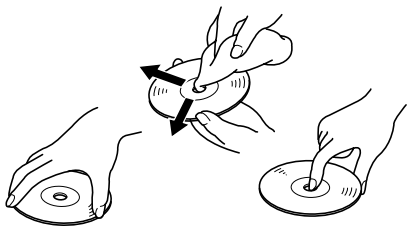
- A new CD may have rough edges on its inner and outer perimeters. If a disc with rough edges is used, proper setting will not be possible and the In-dash CD changer will not play the CD. In addition, the disc may not eject resulting in a malfunction. Remove the rough edges in advance by using a ball-point pen or pencil as shown below. To remove the rough edges, rub the side of the pen or pencil against the inner and outer perimeter of the CD.



- When driving over uneven surfaces, the sound may jump.



- Use discs that have been legitimately produced. If illegally-copied discs such as pirated discs are used, the system may not operate properly.
- Be sure never to touch the signal surface when handling the CDs. Pick up a CD by grasping the outer edge or the edge of the hole and the outer edge.



- Do not stick paper or tape on the CD. Avoid scratching the reverse side (the side without a label). The disc may not eject resulting in a malfunction.
- Dust, finger smudges, and dirt can decrease the amount of light reflected from the signal surface, thus affecting sound quality. If the CD should become soiled, gently wipe it with a soft cloth from the center of the CD to the edge.
- Do not use record sprays, antistatic agents, or household spray cleaners. Volatile chemicals such as benzine and thinner can also damage the surface of the CD and must not be used. Anything that can damage, warp, or fog plastic should never be used to clean CDs.
- Insert discs one by one. If two discs are inserted at the same time, the system may not operate properly.
- The In-dash CD changer ejects the CD if the CD is inserted upside down. Also dirty and/or defective CDs may be ejected.
- Do not insert any disc with a peel-off seal affixed to it.

Handling the In-dash CD changer

- This unit may not be able to play certain CD-R/CD-RWs made using a computer or music CD recorder due to disc characteristics, scratches, smudges, dirt, etc., or due to dust or condensation on the lens inside the unit.
- Storing CDs in the vehicle exposed to direct sunlight or high temperature may damage the CD-R/CD-RWs, and make them unplayable.
- CD-R/CD-RWexceeding 700 MB cannot be played.
- This unit may not be able to play certain discs made using a computer due to the application (writing software) setting used. (For details, consult the store where the application was purchased.)
- It is possible that certain text data, such as titles, recorded on a CD-R/CD-RW may not be displayed when musical data (CD-DA) is playing.
- The period from when a CD-RWis inserted to when it begins playing is longer than a normal CD or CD-R.
- Completely read the instruction manual and cautions for CD-R/CD-RWs.
- Do not use discs with cellophane tape adhering, partially peeled off labels, or adhesive material exuding from the edges of the CD label. Also, do not use discs with a commercially-available CD-R label affixed. The disc may not eject resulting in a malfunction.

n Operating tips for MP3

NOTE

Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via the Internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-ondemand applications. An independent license for such use is required. For details, please visit http://www.mp3licensing.com.

- This audio system handles MP3 files that have been recorded on CD-R/CDRW/CD-ROMs. Discs that have been recorded using the following formats can be played:
  - ISO9660 level 1
  - ISO 9660 level 2
  - Joliet extended format
  - Romeo extended format
- This unit handles MP3 files conforming to the MP3 format containing both header frames and data frames.
- If a disc has both music data (CD-DA) and MP3 files, playback of the two file types differs depending on how the disc was recorded.
- Packet written discs cannot be played on this unit.
- This unit does not play CDs recorded using MP3i (MP3 interactive), MP3 PRO and RIFF MP3 formats.

⚠ CAUTION

This unit can only play MP3 files that have an MP3 file extension (.mp3) attached. Do not attach an MP3 file extension to any other type file as it could cause noise to be emitted or a malfunction in the unit.

Specialized glossary

MP3
Abbreviation for “MPEG Audio Layer 3”.
A technical standard for audio compression as decided by an ISO (International Organization for Standardization) MPEG working group.
Use of MP3 allows for audio data to be compressed to approximately a tenth of the source data size.

ISO 9660
An international standard for logical formatting of CD-ROM files and folders.
It is divided into three separate levels based on differences in file naming procedures, data configuration and other characteristics.

Bit rate
Refers to the volume of data per second, expressed in bps (bits per second).
Generally, the larger the number of the transfer bit rate when compressing an MP3 file, the more information regarding musical reproduction it carries, and therefore the better the sound quality.

Packet writing
A general term for the method, similar to that used for floppy discs or hard drives, of recording the required file in a single increment on a CD-R and similar.

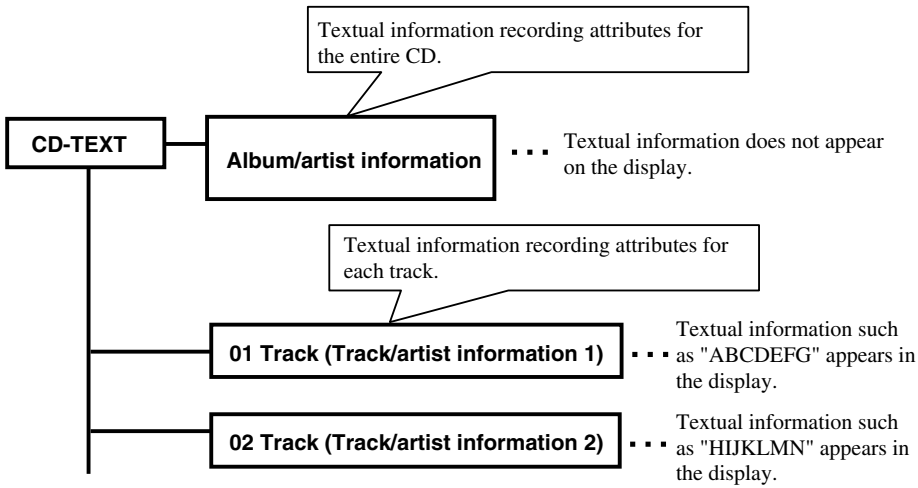
n CD-TEXT

Music CDs are available in which separate music data including album/title names, music name, artist name, and other textual information can be recorded. The data standard for recording textual information to these kinds of music CDs is termed CD-TEXT.

There are two regions of a CD where textual information can be recorded which include regions related to the entire CD (Attributes recorded for the entire CD) and individual track regions (Attributes recorded for individual tracks).

As for this audio unit, textual information (Track/artist information), which can be recorded on individual track regions, appears on the display. Textual information (Album/artist and other information), which can be recorded to regions related to the entire CD, does not appear on the display.

Unless all the textual information is input in one-byte characters, a dotted line (----) will appear in place of the textual information, even if one of the characters is not a one-byte character (Two-byte character).


Textual information recording attributes for the entire CD.
CD-TEXT
Album/artist information
Textual information does not appear on the display.
Textual information recording attributes for each track.
01 Track (Track/artist information 1)
Textual information such as "ABCDEFG" appears in the display.
02 Track (Track/artist information 2)
Textual information such as "HIJKLMN" appears in the display.

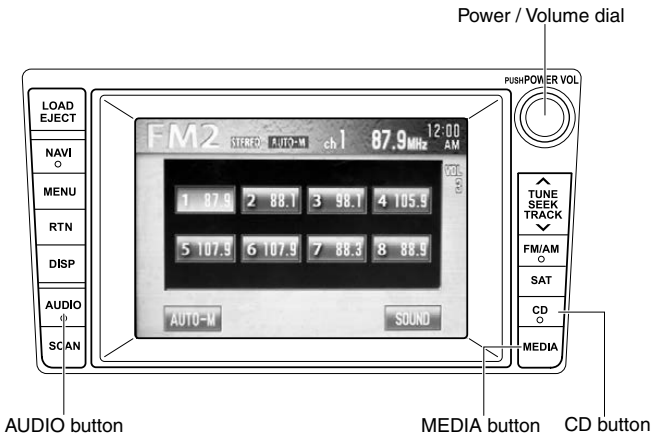
Operating Tips for Display

- **Do not place any objects on the dashboard. If you drop any objects onto the dashboard or spill liquid on it, it may result in system malfunction.**
- **Be careful not to pinch your hands or fingers when the liquid crystal display is closed.**
- **Do not open/close the liquid crystal display manually. It may damage the equipment.**

- The liquid crystal display may not open if the power supply had been interrupted due to the vehicle battery being disconnected.
- If the liquid crystal display stays open/closed (or partly opened) and does not move when the liquid crystal display is pressed, turn the ignition switch and then on again. Then try the open/close operation again. If the liquid crystal display still does not move, contact an Authorized Mazda Dealer.

Beep sound and voice guidance restrictions while using hands-free telephone

The beep sound and voice guidance related to the audio operation are not heard while a hands-free telephone is being used.



n Power ON/OFF

Turn the ignition switch to the ACC or ON position.

Press the power/volume dial to turn the audio system on.

Press the power/volume dial again to turn the audio system off.

Note

To prevent the battery from being discharged, do not leave the audio system on for a long period of time when the engine is not running.

n Volume adjustment

To adjust the volume, turn the power/volume dial.

Turn the power/volume dial to the right to increase volume, to the left to decrease it.

n Audio sound adjustment

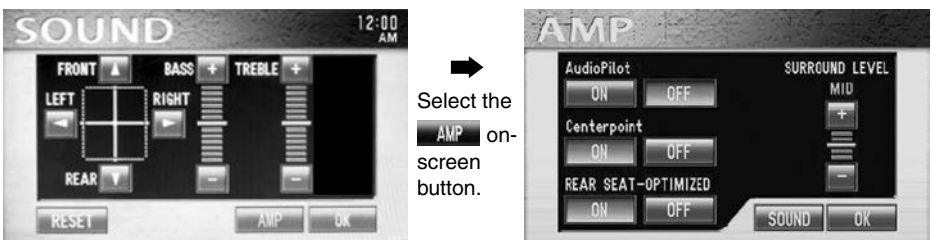
1.Press the desired button corresponding to one of the following modes.

- Audio button (AUDIO): Audio mode
- CD button (CD): CD mode
- MEDIA button (MEDIA): Image and Sound playback is possible using a portable video player connected to an external input terminal.*

*The external input terminal is not equipped on your vehicle because it is not standard equipment.

2.Select the (SOUND) on-screen button to display the sound adjustment screen.

3.Select the AMP on-screen button to display the sound adjustment screen (AudioPilot™, Centerpoint®, Rear seat-optimized).



n Sound quality adjustment

TREB (treble sound)

Select the + on-screen button to increase treble, and − to decrease.

BASS (low pitch sound)

Select the + on-screen button to increase bass, and − to decrease.

n Volume balance adjustment

Front/back volume balance

Select the FRONT on-screen button ▲ to increase the volume at the front, and REAR ▼ to increase the volume to the back.

Left/right volume balance

Select the RIGHT on-screen button ► to increase the volume to the right, and LEFT ◄ to increase the volume to the left.

Note

- Pressing an on-screen adjustment button for 0.5 seconds or more progressively changes the adjustment range towards +/–, up/down, or left/right.
- While an adjustment button is selected in this manner, the level indicator will momentarily stop at the medium range position and a beep sound will be heard before proceeding.
- Select the RESET on-screen button to reset bass, treble, and balance.
- To return to the previous screen, select the OK on-screen button.

n AudioPilot™

AudioPilot automatically adjusts audio volume and sound quality in accordance with the level of noise entering the vehicle interior while driving. When AudioPilot is turned ON, the system automatically calculates the conditions for optimum hearing of sound which may be difficult to hear depending on exterior noise.

Select the AUDIOPILOT on-screen ON button when AudioPilot is on. Select the AUDIOPILOT on-screen OFF button when AudioPilot is off.

AudioPilot™ is a registered trademark of Bose Corporation.

n Centerpoint®

Centerpoint offers you the experience of 5.1 channel surround sound in your vehicle even with your conventional 2 channel sound.

Select the Centerpoint on-screen ON button when Centerpoint is on. Select the Centerpoint on-screen OFF button when Centerpoint is off.

Note

- Centerpoint does not work with AM/FM/SIRIUS/AUX.
- If a CD or a DVD is inserted in the Rear Entertainment System main unit and selected as an audio source, and the CD or DVD audio is 5.1 DolbyDigital/DTS audio, Centerpoint cannot be selected.

Centerpoint® is a registered trademark of Bose Corporation.

n Rear seat-optimized (With Rear Entertainment System)

The rear seat-optimized function allows passengers to optimize the audio output to the rear for a more pleasurable acoustic field.

Select the REAR SEAT-OPTIMIZED on-screen ON button to increase the surround effect to the rear seat. Select the REAR SEAT-OPTIMIZED on-screen OFF button to apply the surround effect to all seats.

Note

Rear seat-optimized is only effective if a CD or a DVD is inserted in the Rear Entertainment System main unit and selected as an audio source, and the CD or DVD audio is 5.1 DolbyDigital/DTS audio.

n Surround

Centerpoint

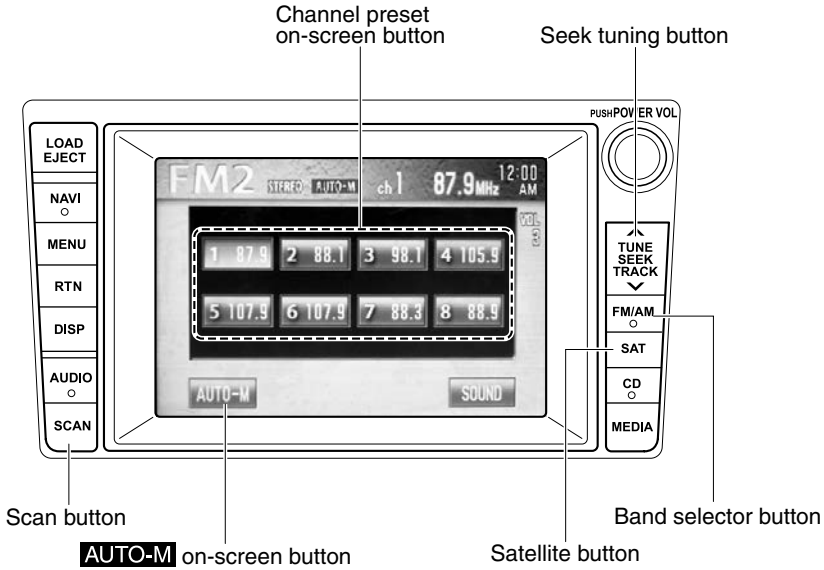
When Centerpoint is on, the surround effect can be enjoyed at five separate levels.

Indication	Volume change
CENTERPT MIN	Minimum
CENTERPT LOW	Low
CENTERPT MID	Medium
CENTERPT HI	High
CENTERPT MAX	Maximum

Rear seat-optimized

When rear seat-optimized is on, the surround effect can be enjoyed at five separate levels.

Indication	Volume change
Surround MIN	Minimum
Surround LOW	Low
Surround MID	Medium
Surround HI	High
Surround MAX	Maximum



n Radio ON

Press a band selector button (FM/AM) to turn the radio on.

n Band selection

Successively pressing the band selector button (FM/AM) switches the bands as follows:
FM1 → FM2 → AM.

The selected mode will be indicated. If FM stereo is being received, STEREO will be displayed.

n Tuning

The radio has the following tuning methods: Manual, Seek, Scan, Preset channel, and Auto memory tuning. The easiest way to tune stations is to set them on preset channels.

Note

- If the FM broadcast signal becomes weak, reception automatically changes from STEREO to MONO for reduced noise, and the STEREO indicator will go out.
- To clear the information, press the NAVI button.
- If the power supply is interrupted (fuse blows or the battery is disconnected), the preset channels will be canceled.

n Manual tuning

Pressing the seek tuning button will change the frequency higher or lower.

n Seek tuning

Pressing and holding the seek tuning button (∧, ∨) will cause the tuner to seek a higher or lower frequency automatically.

Note

If you continue to press and hold the button, the frequency will continue changing without stopping.

n Scan tuning

Press the (SCAN) button to automatically sample strong stations.
Scanning stops at each station for about 5 seconds. To hold a station, press the (SCAN) button again during this interval.

n Preset channel tuning

The 8 preset channels can be used to store 8 AM and 16 FM stations.

1. To set a channel first select AM, FM1, or FM2. Tune to the desired station.
2. Select any channel preset on-screen button for about 2 seconds until a beep sound is heard. The selected preset channel number and station frequency will be displayed. The station is now held in the memory.
3. Repeat this operation for the other stations and bands you want to store. To tune one in the memory, select AM, FM1, or FM2 and then press its channel preset button. The station frequency and the channel number will be displayed.

Note

If the power supply is interrupted (fuse blows or the battery is disconnected), the preset channels will be canceled.

n Auto memory tuning

This is especially useful when driving in an area where the local stations are not known. Additional AM/FM stations can be stored without disturbing the previously set channels.

Select and hold the AUTO-M on-screen button for about 2 seconds until a beep sound is heard; the system will automatically scan and temporarily store up to 8 stations with the strongest frequencies in each selected band in that area.

n Audio Sound Adjustment

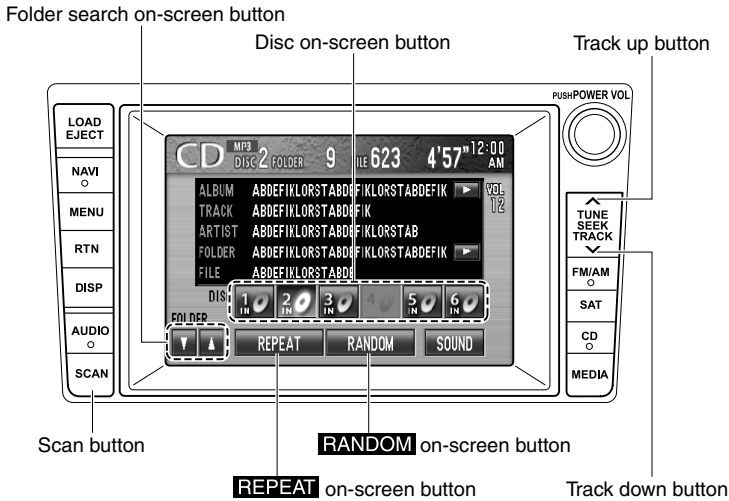
Refer to “Power/Volume/Sound Controls”.

n Satellite Radio (SAT)

Vehicles equipped with the separately purchased SIRIUS digital satellite radio unit have the ability to receive up to 100 channels of digital quality programming coast to coast via satellite. For information on use, read the Satellite Radio Kit manual accompanying the SIRIUS digital satellite radio unit. A subscription to SIRIUS digital satellite radio service is required (available in the U.S. - Except Alaska and Hawaii) to enable this feature once the separately purchased SIRIUS digital satellite radio unit has been installed. For subscription information or digital satellite radio technical issues contact SIRIUS directly at:

-Web: www.siriusradio.com
-Phone (24 hrs/day, 7 days/week): 888-539-SIRI (7474)
-E-mail: customercare@sirius-radio.com
-Mailing Address: Sirius Satellite Radio
1221 Avenue Of The Americas
New York, NY 10020
Attention: Customer Care

Include your Sirius Radio ESN (Electronic Serial Number) when subscribing or requesting technical assistance. See the Satellite Radio Kit manual accompanying the SIRIUS unit for complete satellite radio activation procedures and information on how to display the ESN#.



n Inserting the CD

The display must be open (lowered) to insert the CD.

The CD must be label-side up when inserting. The auto-loading mechanism will set the CD and begin play. There will be a short lapse before play begins while the player reads the digital signals on the CD.

Note

"IN" is displayed on the tray number for a CD that is inserted.

n During CD playback

The disc title, the track title, and the artist name will be displayed.

n During MP3 CD playback

The album title, the track title, the folder name, the file number, and the artist name will be displayed.

Note

The CD will begin playback automatically after insertion. A CD cannot be inserted while the display reads "WAIT".

n Normal insertion

1.Press the (LOAD/EJECT) button.

2.Press the LOAD on-screen button lightly.
The display opens and "WAIT" is displayed.

3.Lightly insert the CD after "IN" is displayed. The CD will be inserted and played automatically after the display is closed.

Note

- A CD cannot be inserted while "WAIT" is displayed. Wait until "IN" is displayed.
- The CD loading operation cancels 15 seconds after "IN" is displayed or if the (LOAD/EJECT) button is pressed again.

n Inserting CDs into desired tray number

1.Press the (LOAD/EJECT) button.

2.Press the desired tray number, then press the LOAD on-screen button lightly.
The display opens and "WAIT" is displayed.

Note

The CD loading operation cancels if no button is pressed for about 30 seconds after the desired tray number is pressed, or if the (LOAD/EJECT) button is pressed again.

3.Lightly insert the CD after "IN" is displayed. The CD will be inserted and played automatically after the display is closed

Note

- The CD loading operation cancels 15 seconds after the LOAD on-screen button is pressed or the (LOAD/EJECT) button is pressed again.
- The CD cannot be inserted to the desired tray number if it is already occupied.

n Multiple insertion

1.Press the (LOAD/EJECT) button.

2.Press the LOAD on-screen button for 1.5 seconds or more.
The display opens and "WAIT" is displayed.

3.Lightly insert the CD after "IN" is displayed.

4.When "IN" is displayed again, insert the next CD.
Repeat this procedure for the number of CDs to be inserted (maximum of 6 including the CD in the tray).
The CD will begin playback automatically after insertion and the display closes.

Note

The CD loading operation cancels 15 seconds after "IN" is displayed, or the (LOAD/EJECT) button is pressed again.

n Normal ejection

1.Press the (LOAD/EJECT) button.

2.Press the EJECT on-screen button lightly.

3.The CD ejects after the display is opened and the desired tray number flashes.

4.The display closes automatically after the ejection is fully completed.

Note

If the CD is not removed from the slot within 15 seconds, it will be re-inserted. When this happens, or if the (LOAD/EJECT) button is pressed again, the CD ejecting operation will be canceled.

n Ejecting CDs from desired tray number

1.Press the (LOAD/EJECT) button.

2.Press the desired CD tray number, then press EJECT on-screen button lightly.

Note

The CD ejecting operation cancels if the EJECT on-screen button is not pressed for about 30 seconds after the desired tray number is pressed, or if the (LOAD/EJECT) button is pressed again.

3.The CD will be ejected automatically after the display is opened and the desired tray number flashes.

Note

- If only one CD is inserted in the tray, the display opens and the CD is ejected without pressing EJECT on-screen button.
- If the CD is not removed from the slot within 15 seconds or if the (LOAD/EJECT) button is pressed, the CD ejecting operation will be canceled.

4.The display closes after the CD is ejected.

n Multiple ejection

1.Press the (LOAD/EJECT) button.

2.Press the EJECT on-screen button for 1.5 seconds or more.
The CD ejects after the display is opened and the desired tray number flashes

3.Pull out the CD.

4.The next CD will be ejected automatically.
This operation repeats until all the CDs are taken out.

Note

If the CD is not removed from the slot within 15 seconds or if the (LOAD/EJECT) button is pressed, the CD ejecting operation will be canceled.

n Playing

Press the (CD) button to start play when a CD is in the unit.
If there is no CD in the unit when the (CD) button is pressed, “NO DISC” will flash on and off.
The song information will be displayed during playback.

Music CD

MP3 CD

Note

- "-------" will be displayed for files without a file, track or other name input.
- This unit can read English (including numerals), French, and Spanish one-byte characters.
- The displayable number of characters on each title is a maximum of 64.

(Music CDs)

- Although textual information (Track/artist information) recorded to each track appears in the display, textual information (Album/artist information) recorded for the entire CD does not appear in the display.
  For details, refer to "CD-TEXT" (☞ page 62).

Select the ► on-screen button if the whole title cannot be displayed at one time. The screen changes to display the rest of the characters.

n Fast-forward/Reverse

Press the track up button (∧) to advance through a track at high speed until a beep sound is heard.

Press the track down button (∨) to reverse through a track at high speed until a beep sound is heard.

n Track search

Press the track up button (∧) once to skip forward to the beginning of the next track.

Press the track down button (∨) once to skip back to the beginning of the current track.

Press the track down button (∨) during track search to skip back to the beginning of the previous track.

n Disc search

To change the disc, press any DISC on-screen button during playback.

n Folder search (during MP3 CD playback)

To change to the previous folder, select the ▲ on-screen button, or select the ▼ on-screen button to advance to the next folder.

n Music scan

This feature helps to find a program by playing about the first 10 seconds of each track.
Press the (SCAN) button during play to start scan play operation (the track number will flash).
Press the (SCAN) button once again to cancel scan play.

Note

If the unit is left in scan, normal play will resume where scan was selected.

n Repeat play

During music CD playback

1.Select the REPEAT on-screen button during playback to play the current track repeatedly.

2.Select the button again to cancel the repeat play.

During MP3 CD playback

(Track repeat)

1.Select the REPEAT on-screen button during playback to play the current track repeatedly.

2.To cancel the repeat play, select the button again after 3 seconds.

(Folder repeat)

1.Select the REPEAT on-screen button during playback, and then select the button again within 3 seconds to play the tracks in the current folder repeatedly.

2.Select the button again to cancel the repeat play.

Random play

Tracks are randomly selected and played.

During music CD playback

1.Select the RANDOM on-screen button during playback to play the tracks on the CD randomly.

2.Select the button again to cancel the random play.

During MP3 CD playback

(Folder random)

1.Select the RANDOM on-screen button during playback to play the tracks in the folder randomly.

2.To cancel the random play, press the button again after 3 seconds.

(CD random)

1.Select the RANDOM on-screen button during playback, and then select the button again within 3 seconds to play the tracks on the CD randomly.

2.Select the button again to cancel the random play.

n Audio sound adjustment

Refer to “Power/Volume/Sound Controls”.

n Operating tips for audio control switch

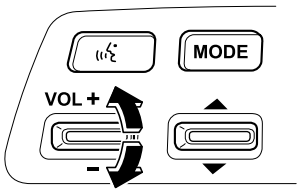
VOICE switch

Refer to “Voice Recognition” (☞ page 40).

Adjusting the Volume

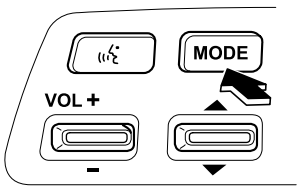
To increase the volume, pull up the volume switch.

To decrease the volume, press down the volume switch.

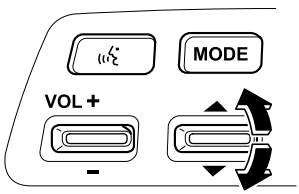


Changing the Source

Press the mode switch (MODE) to change the audio source (FM1 radio > FM2 radio > AM radio > CD changer > SIRIUS > cyclical).



Seek Switch



When listening to the radio

Pull up or press down the seek switch, the radio switches to the next/previous stored station in the order that it was stored (1-6).
Pull up or press down the seek switch for about 2 seconds until a beep sound is heard to seek all usable stations at a higher or lower frequency whether programmed or not.

When playing a CD

Pull up the seek switch to skip to the next track.
Press down the seek switch to repeat the current track.

n Safety Certification

This CD player is made and tested to meet exacting safety standards. It meets FCC requirements and complies with safety performance standards of the U.S. Department of Health and Human Services.

Cautions

- This CD player should not be adjusted or repaired by anyone except qualified service personnel.
  If servicing is required, contact an Authorized Mazda Dealer.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser exposure. Never operate the CD player with the top case of the unit removed.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note

For CD player section:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

Contents

Rear View Monitor

n Rear View Monitor
- Rear View Monitor Cautions 84
- Rear View Parking Camera Location 84
- Switching to the Rear View Monitor Display 85
- Displayable Range on the Screen 85
- Rear View Monitor Operation 86
- Variance Between Actual Road Conditions and Displayed Image 87

Rear View Monitor

Rear View Monitor Cautions

The rear view monitor is a visual assist system when reversing the vehicle that provides images from the rear of the vehicle.

Warning

The rear view monitor is only a visual assist device when reversing the vehicle. The images on the screen may be different from the actual conditions. Always drive carefully confirming the safety of the rear and the surrounding conditions by looking directly with your eyes. Reversing the vehicle by only looking at the screen may cause an accident or a collision with an object.

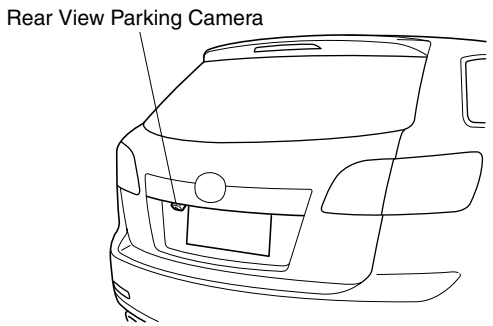
Cautions

- When the display is cold, images may course across the monitor or the screen and may be dimmer than usual, which could cause difficulty in confirming the surrounding conditions of the vehicle. Always drive carefully confirming the safety of the rear and the surrounding conditions by looking directly with your eyes.
- Do not apply excessive force to the camera. The camera position and angle may deviate.
- Do not disassemble, modify, or remove it as it may no longer be waterproof.
- The camera cover is made of plastic. Do not apply degreasing agents, organic solvents, wax, or glass coating agents to the camera cover. If any are spilled on the cover, wipe off with a soft cloth immediately.
- Do not rub the cover excessively, or polish it using an abrasive compound or a hard brush. The cover may be damaged affecting the image.

Note

- If water, snow, or mud is stuck on the camera lens, wipe it off using a soft cloth. If it cannot be wiped off, use a mild detergent.
- If the camera temperature changes rapidly, such as by pouring hot water on it under cold temperature conditions, the rear view monitor may not operate correctly.

Rear View Parking Camera Location



Switching to the Rear View Monitor Display

Shift the shift lever to R with the ignition switch in the ON position to switch the display to the rear view monitor display.

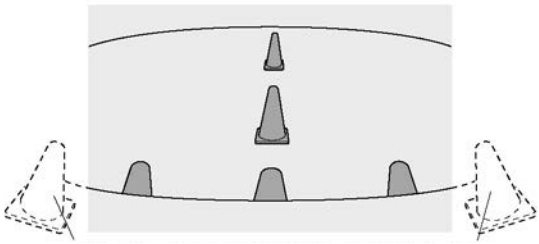
Note

When the shift lever is shifted from R to another shift lever position, the screen returns to the previous display.

Displayable Range on the Screen

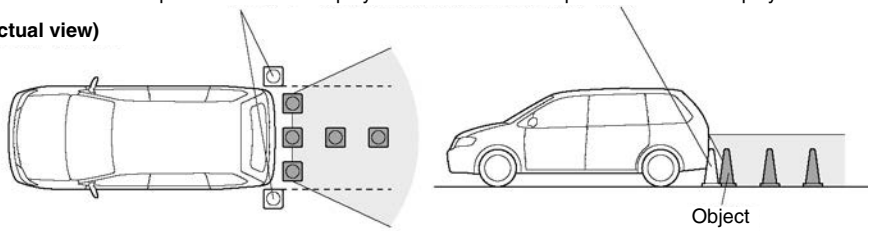
The images on the screen may be different from the actual conditions.

(Screen display)



Both bumper ends are not displayed. Both bumper ends are not displayed.

(Actual view)



Note

- The displayable range varies depending on the vehicle and road conditions.
- The displayable range is limited. Objects under the bumper or around the bumper ends cannot be displayed.
- The distance appearing in the displayed image is different from the actual distance because the rear view parking camera is equipped with a specific lens.
- Some optionally installed vehicle accessories may be picked up by the camera. Do not install any optional parts that can interfere with the camera view, such as illuminating parts or parts made of reflective material.
- It may be difficult to see the display under the following conditions, however, it does not indicate a malfunction.
  - In darkened areas.
  - When the temperature around the lens is high/low.
  - When the camera is wet such as on a rainy day or during periods of high humidity.
  - When foreign material such as mud is stuck around the camera.
  - When the camera lens reflects sunlight or headlight beams.
- If the camera picks up a high-intensity light such as sunlight reflected off the vehicle body, a bright belt (light line) may appear on the display. (Smear phenomenon)

Rear View Monitor Operation

The operation of the rear view monitor when reversing the vehicle varies depending on the traffic, road, and vehicle conditions. The amount of steering and the timing also varies depending on conditions, so confirm the surrounding conditions directly with your eyes and steer the vehicle in accordance with the conditions.
Be well aware of the above cautions prior to using the rear view monitor.

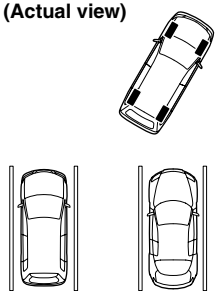
Note

Images taken by the rear view parking camera and displayed on the navigation display are mirror images.

(1) Shift the shift lever to R to switch the display to the rear view monitor display.
(2) Confirming the surrounding conditions, reverse the vehicle.

(Screen display)

(Actual view)



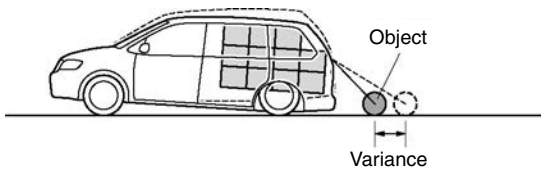
(3) When the shift lever is shifted from R to another shift lever position, the screen returns to the previous display.

Variance Between Actual Road Conditions and Displayed Image

Some variance occurs between the actual road and the displayed road. Such variance in distance perspective could lead to an accident. Note the following conditions that may cause a variance in distance perspective.

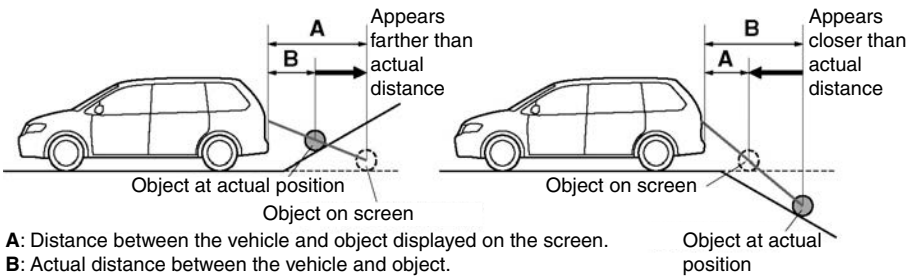
1 When the vehicle is tilted due to the weight of passengers and load

When the vehicle rear is lowered, the object displayed on the screen appears farther than the actual distance.



2 When there is a steep grade behind the vehicle

When there is a steep upgrade (downgrade) behind the vehicle, the object displayed on the screen appears farther (downgrade: closer) than the actual distance.



A: Distance between the vehicle and object displayed on the screen.
B: Actual distance between the vehicle and object.

MEMO

Contents

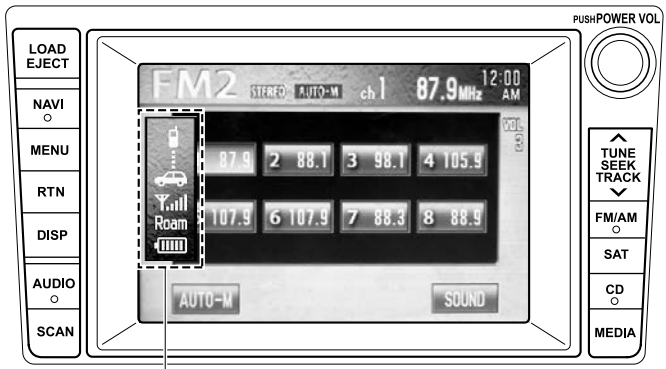
Hands-free Telephone

n Hands-free Telephone
l Screen display of hands-free telephone information 90

Hands-free Telephone

Screen display of hands-free telephone information

If the hands-free telephone is operated, information such as radio wave reception conditions of the hands-free telephone are displayed on the screen. For details, refer to the "Hands-free telephone system" in the owner's manual.



Hands-free telephone information